

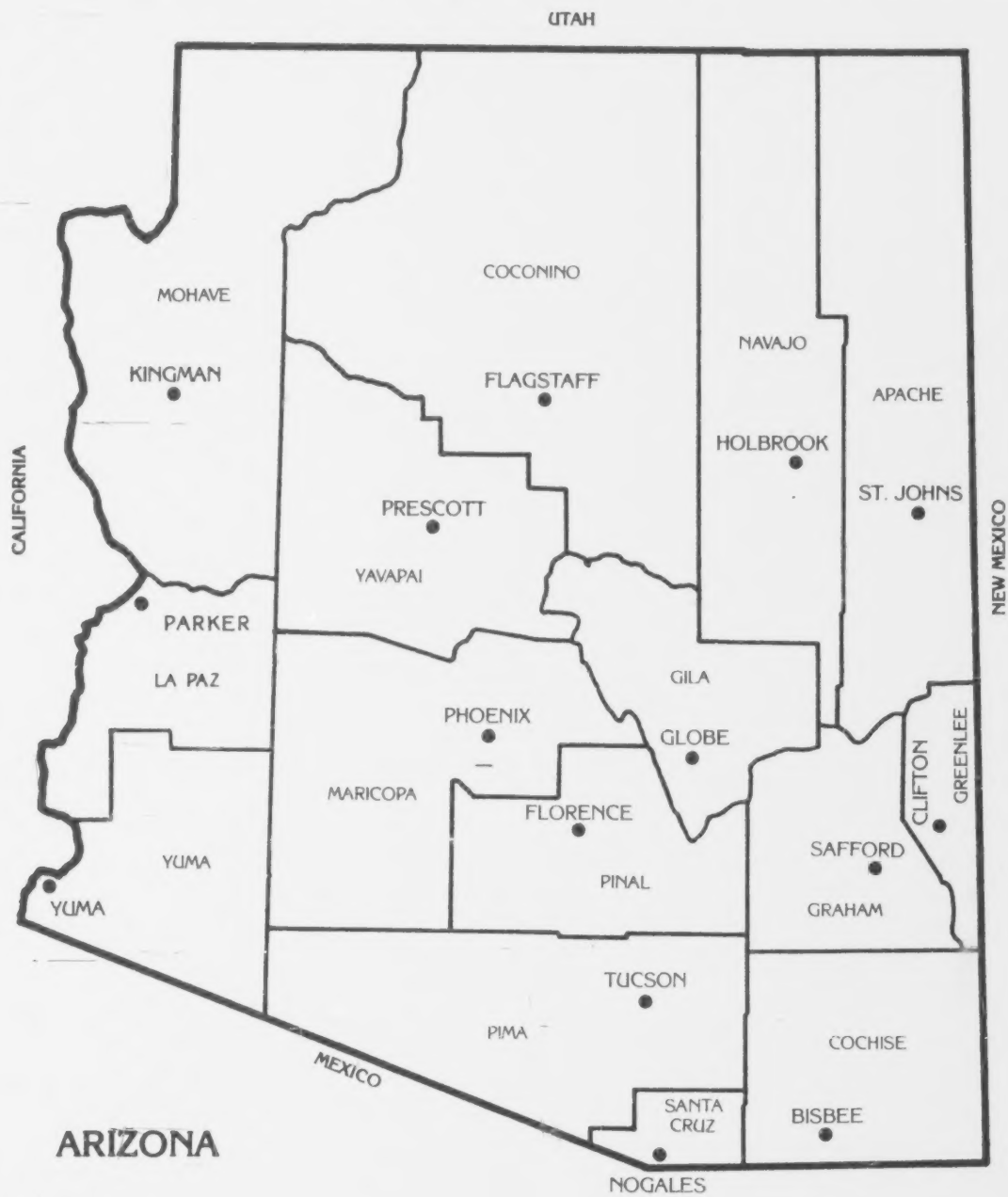
JUNE 1986

Arizona Occupational Profile

**A Labor Market Information Publication
of the Department of Economic Security**



MINING



OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program--a cooperative effort between Arizona and the U.S. Bureau of Labor Statistics.

This *Occupational Profile* is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 700 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The *Occupational Profiles* contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining	Finance, Insurance, and Real Estate
Construction	Services
Manufacturing	Hospitals
Transportation, Communications, and Public Utilities	Educational Services
Trade	Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY INFORMATION

INDUSTRY DESCRIPTION

Establishments categorized in mining include firms that extract materials occurring naturally: solids, such as coal and ores; liquids, such as crude petroleum; and gases, such as natural gas. The term "mining" also includes exploration, quarrying, well operation, milling, and other preparation customarily done at the mine site or as a part of mining activity. Firms primarily involved with smelting and refining are categorized in manufacturing rather than mining.

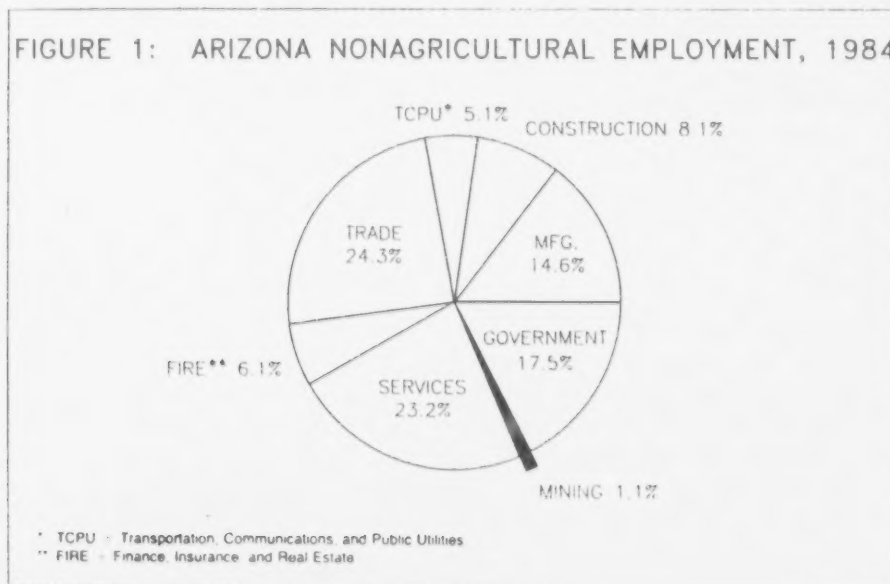
A detailed description of the types of firms surveyed is found in the *Standard Industrial Classification (SIC) Manual*¹ under codes 10 through 14.

INDUSTRY CHARACTERISTICS

Approximately 1 percent or 13,600 of Arizona's 1.2 million workers earning a wage or salary in May 1984 were directly associated with mining. This capital intensive industry's small employment total belies the state's role as a major U.S. producer of mined products and the industry's economic significance to certain Arizona communities. Valued at \$1.5 billion in 1983, mined products in Arizona accounted for more than 7 percent of the total U.S. non-fuel mineral output of \$21 billion. Only California and Texas produced a greater value of minerals with 8.3 and 7.4 percent of the nation's total, respectively.

The great majority of Arizona's mine workers are engaged in the extraction of metal ores--92 percent of which are involved in the mining and milling of copper. In 1983, with 16 of the nation's 25 leading

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1984



¹Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 31-43.

copper producing mines within its boundaries, Arizona contributed 65 percent of the total U.S. production. Valued at more than \$1.75 billion in that year, production of the metal in the United States trailed that of both Chile and the U.S.S.R.

Arizona's lofty position as a producer of molybdenum, silver, and gold results primarily from efforts to recover these metals as by-products and coproducts of copper production. Also, the recovery of turquoise at several copper mines contributed to Arizona's premier ranking, nationally, in gemstone production.

Employing approximately 1,900 in 1984, firms mining fuels and nonmetallic minerals represented 14 percent of Arizona's mine workers. Miners of bituminous coal accounted for the bulk of this employment and were followed by those mining sand and gravel, lime, and crushed stone.

With 1 percent of the state's workers, Arizona's copper industry provided \$369 million or 1 percent of the state's total personal income in 1984. Approximately 4 percent, however, of the state's basic personal income was generated by the industry. For comparison, other sources of this income, which is derived from the export of goods and services outside the state, were manufacturing (29 percent), agriculture (7 percent), and tourism (4 percent).

Mining activities, and therefore employment, exist in every Arizona county. Dictated by the location of mineral deposits, most of the mining employment is concentrated in Pima and Pinal counties where copper deposits are located. Copper was produced at 29 operations in 1983

FIGURE 2: ARIZONA MINE PRODUCTION AND SHARE OF U.S. OUTPUT 1983

Commodity	Value	% Share of U.S. Output	Rank in Nation
Copper	\$1,144,286	65	1
Molybdenum	79,459	49	1
Sand and Gravel	75,000	4	NA
Silver	51,383	10	5
Gold	26,284	3	7
Stone (Crushed)	24,079	a	NA
Gemstones	2,800	37	1

NA - Not Available

a - Less than .5 Percent

Source: U.S. Department of Interior, Bureau of Mines.

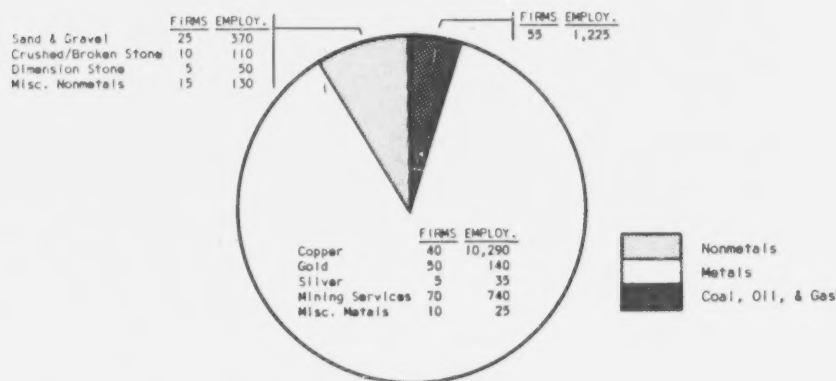
FIGURE 3: LEADING NONFUEL MINERAL PRODUCING STATES IN 1983

	Value (000s)	Percent of U.S. Total	Principal Minerals, in Order of Value
California	\$1,764,401	8.3	Boron Minerals, Cement, Sand and Gravel, Stone (Crushed)
Texas	1,568,557	7.4	Cement, Stone (Crushed), Sulphur, Sand and Gravel
Arizona	1,510,878	7.1	Copper, Cement, Molybdenum, Sand and Gravel
Minnesota	1,455,030	6.9	Iron Ore, Sand and Gravel, Stone (Crushed)
Florida	1,274,979	6.0	Phosphate Rock, Stone (Crushed), Cement, Clays
Michigan	1,160,691	5.5	Iron Ore, Cement, Magnesium Compounds, Salt
Georgia	850,224	4.0	Clays, Stone (Crushed), Cement, Stone (Dimension)

Source: U.S. Department of Interior, Bureau of Mines.

in the following counties, in descending order of output: Pima, Pinal, Greenlee, Gila, Yavapai, Cochise, and Mohave. Large-scale copper operations accounted for virtually all the molybdenum produced in Arizona in 1983. Ninety-two percent of the state's silver was produced by 12 large copper mines, while 95 percent of the gold originated in eight copper operations. Pinal County yielded the most gold and was followed by Greenlee, Pima, Cochise, Mohave, and Yavapai counties.

FIGURE 4: MINING EMPLOYMENT
BY MAJOR ACTIVITY - 1984



Firms mining copper tend to be much larger than those working other deposits. Pinal and Pima counties account for 54 percent of Arizona's mining employment, yet, only 29 percent of all mining firms are found within the borders of these two counties. Arizona's 40 copper mining firms employed an average of 260 employees in 1984, while the 55 gold and silver mining establishments, for example, employed an average of three employees and had a wider geographical distribution. Although only 36 percent of the 290 mining establishments in Arizona mined metal ores in 1984, they employed 86 percent of the industry's workers.

Statewide employment in mining is not substantial, but the industry continues to be an important basic component in several counties and is the principal employer in some communities. In 1984, approximately 50 percent of Greenlee County's workers were employed by a mining company. In Pinal County, one of every four workers was employed in mining, while in Gila County the ratio was one in five.

FIGURE 5: MINING EMPLOYMENT AND MINERAL PRODUCTION BY COUNTY

County	Average 1984 Employment	Leading Minerals Produced in 1984, By Order of Value
Pinal	3,900	Copper, Molybdenum, Gold, Silver, Sand & Gravel (Construction)
Pima	3,400	Copper, Molybdenum, Cement, Silver, Sand & Gravel (Const.)
Greenlee	1,750	Copper, Gold, Silver, Sand & Gravel (Const.), Molybdenum
Gila	1,550	Copper, Molybdenum, Silver, Gold, Sand & Gravel (Const.), Limestone
Havas	1,050	Coal, Sand & Gravel
Maricopa	600	Sand & Gravel (Const.), Limestone, Salt, Clays
Yavapai	500	Copper, Cement, Limestone, Molybdenum, Silver, Sand & Gravel (Const.)
Cochise	225	Copper, Limestone, Gold, Silver, Sand & Gravel, Lead
Mohave	225	Sand & Gravel (Const.), Copper, Gold, Molybdenum
Graham	75	Sand & Gravel (Const.), Potash
Yuma/La Paz	75	Sand & Gravel (Const.), Copper, Silver, Sand & Gravel (Industrial)
Apache	50	Sand & Gravel (Ind.), Clays, Sand & Gravel (Const.)
Cocconino	50	Sand & Gravel (Const.)
Santa Cruz	Confidential	Sand & Gravel (Const.)

Source: U.S. Department of Interior, Bureau of Mines.

INDUSTRY TRENDS

The first significant gold discovery in Arizona by Americans is reported to have occurred in 1858 on the Gila River. A decade of scattered gold mining activity soon gave way to the search for and development of silver, and Arizona's standing as a producer of mined products was established. Because silver was often found in proximity to copper deposits, certain gold and silver mining firms evolved into copper producers. Founded in 1872, the Morenci-Clifton District was the state's first successful copper mining operation.

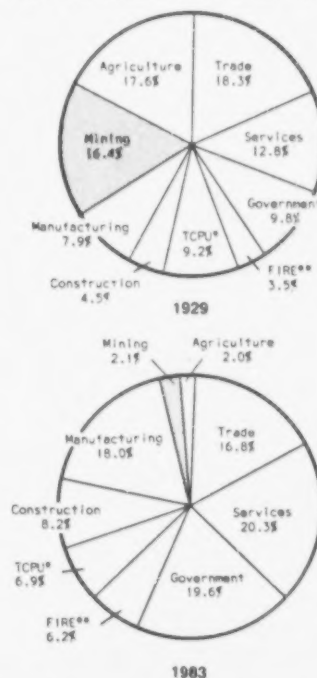
Mining quickly established itself as Arizona's most important industry--employing 21 percent of the state's labor force by 1880. By 1896, total mineral output reached \$14 million as compared to total output for the state's stock and agriculture industries valued at \$3 million and \$2 million, respectively.

Ensuing diversification of economic activity in the state brought about a profile that reflected growing service and trade industries. In 1929, for example, personal income derived from services and trade nearly equaled that from mining and agriculture. It was at this time, however, that the significance of mining to the state as a whole began to decline. Mining's share of Arizona's personal income declined from 16 percent in 1929 to the current level of 2 percent. Less an indication of the health of the mining industry, this evolution reflects the diversification of the state's economy and the rapid expansion of other industries in the state.

Although the long-term employment trend in Arizona's mining industry has been upward, it has, over the years, fluctuated as it reacts to international forces affecting the price, demand, and supply of copper. This long-term trend notwithstanding, mining employment has, since a recent peak in 1981, dropped precipitously. From June 1981 to September 1982, employment in mining declined by nearly half and by 1984 averaged 13,300--a level that had not been seen since 1959. Despite these declines, output tonnage in 1984 was only 11 percent below the average of the 1970s--reflecting productivity gains made by the industry in recent years. Because of price decreases, however, the contribution of mining's output to the state economy has diminished more severely.

Having doubled its employment between 1967 and 1974, mining employment subsequently followed a roller

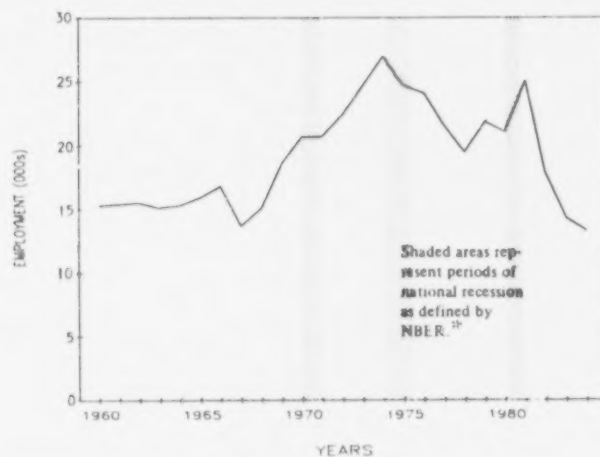
FIGURE 6: ARIZONA'S SHIFTING INDUSTRY PROFILE
BASED ON SOURCE OF PERSONAL INCOME



* TCPU = Transportation, Communications, and Public Utilities
** FIRE = Finance, Insurance, and Real Estate

Source: Bureau of Business and Economic Research
College of Business, Arizona State University

FIGURE 7: ARIZONA MINING EMPLOYMENT 1960-1984



* National Bureau of Economic Research

coaster trail--falling victim to the 1974-75 recession, cresting in 1981, and tumbling again amidst recessionary pressures in 1981-82. Speculation in the commodities markets contributed significantly to the record-level prices of copper and precious metals in the first few months of 1980. By year's end, however, the effects of the copper strike, depressed automobile and housing markets, and reduced demand in manufacturing all contributed to the decline in copper, gold, and silver production. The following year (1981) saw employment in Arizona's mines grow substantially as the industry rebounded from low employment levels that resulted, to a great extent, from strikes in 1977 and 1980. Such growth required a severe retrenchment in 1982 however, and in the face of deteriorating market conditions employment was slashed to less than 15,000 by the end of 1982. The value of Arizona non-fuel mineral production declined from the record high \$2.6 billion in 1981, to \$1.6 billion in 1982 and \$1.5 billion in 1983--a 42 percent drop in 3 years.

Amidst increased imports of low-priced copper and consequent increased domestic inventories and depressed prices, the U.S. copper mining industry continued to languish in 1983. A rebound in the domestic economy in 1983 was not accompanied by the same in the world economy. Aside from the U.S., Western World consumption of copper remained severely depressed, yet governments in foreign producing countries encouraged higher production levels to maintain employment and foreign exchange flows. As a consequence, excess supplies were sold in U.S. markets and further depressed prices. Between 1975 and 1983, imports of refined copper increased by 253 percent and concentrates by 241 percent. Chile, currently the world's lowest cost producer, accounted for 56 percent of U.S. imports of refined and blister copper in 1983.

Total employment in Arizona's mining industry is predicted to be slightly more than 10,000 in 1988--representing a decline of nearly 3,000 over four years. However, year-to-year employment fluctuations in the mining industry will continue to result from international volatility of prices and the industry's sensitivity to general business conditions. Issues continuing to face the industry include foreign production subsidies, development bank and International Monetary Fund loans, devaluation of foreign currencies, and continued expansion of foreign copper-producing facilities and production. Domestic factors of concern include the influence of a strong dollar on exports and imports, high interest rates, the renegotiation of labor contracts, and continued expenditures for pollution abatement.

FIGURE 8: NONFUEL MINERAL PRODUCTION IN ARIZONA

Mineral	1981		1982		1983	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
ARIZONA						
Clays ----- thousand short tons.	148	\$1,105	143	\$998	151	\$1,425
Copper (recoverable content of ores, etc.)						
metric tons.	1,040,813	1,953,142	[†] 769,521	[†] 1,235,055	678,216	1,144,285
Ceramic stones -----						
troy ounces.	NA	3,250	NA	2,800	NA	2,800
Gold (recoverable content of ores, etc.)						
troy ounces.	100,339	46,120	61,050	22,949	61,991	26,284
Gypsum ----- thousand short tons.	213	2,594	175	1,205	265	1,929
Lead (recoverable content of ores, etc.)						
metric tons.	993	800	359	202	144	69
Lime ----- thousand short tons.	538	29,913	326	17,080	340	16,700
Molybdenum (content of concentrate)						
thousand pounds.	35,808	254,345	[†] 20,445	[†] 89,928	23,934	79,459
Pumice ----- thousand short tons.	1	3	1	7	2	15
Sand and gravel -----						
Construction ----- do.	[†] 20,990	[†] 63,340	19,124	58,375	[†] 23,200	[†] 75,000
Industrial ----- do.	179	2,455	107	1,617	W	W
Silver (recoverable content of ores, etc.)						
thousand troy ounces.	8,055	84,728	[†] 6,309	[†] 50,159	4,492	51,383
Stone -----						
Crushed ----- thousand short tons.	6,315	26,263	[†] 5,200	[†] 22,200	4,755	24,079
Dimension ----- do.	W	578	W	[†] 580	(¹)	1
Zinc ----- metric tons.	138	135	--	--	--	--
Combined value of asbestos (1981), barite (1981), cement, perlite, pyrites, salt, tungsten ore and concentrate (1981), vanadium (1981), and value indicated by symbol W	XX	93,009	XX	79,105	XX	87,449
Total -----	XX	2,561,780	XX	[†] 1,582,260	XX	1,510,878

[†]Revised NA Not available XX Not applicable W Withheld to avoid disclosing company proprietary data

^{*}Estimated

¹ Less than 1/2 unit

Source: U.S. Department of Interior, Bureau of Mines.

An ever-changing demand for copper will result from worldwide technological and social change. Contributing to a greater demand for copper is the trend to underground power distribution, mass-transit, electric cars, automation, and increased computer use. Resistance of copper alloys to the corrosive effects of seawater, and the metal's high heat transfer properties, make copper ideal for use in distillation processes used in seawater desalinization. Long-term trends inhibiting copper consumption include the substitution of aluminum and copper-clad aluminum for copper microminiaturization of communication circuitry, the use of fiber-optics and satellites in communications, and the metal's relatively high cost.

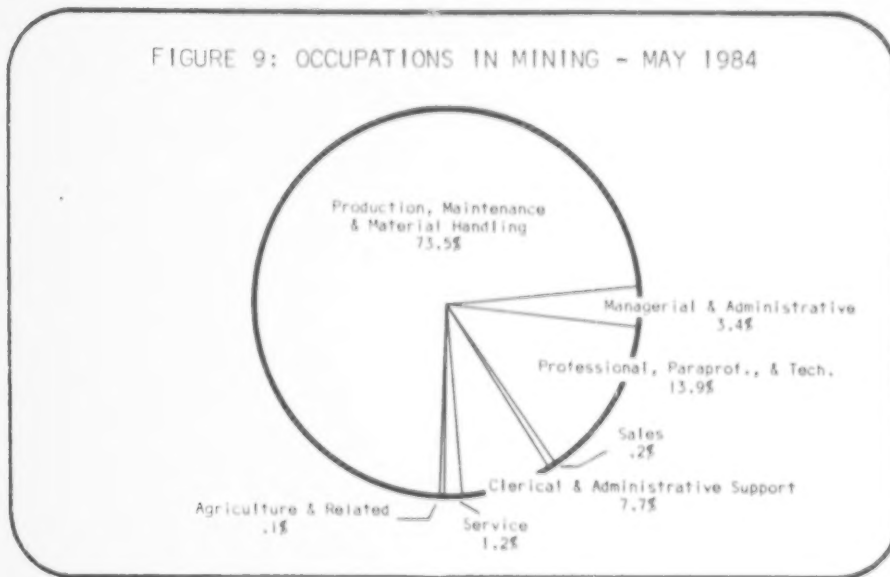
OCCUPATIONAL INFORMATION

OCCUPATIONAL ANALYSIS

Production, maintenance, and material handling occupations dominate the mining industry and constitute an occupational category that represents three of every four mining workers in Arizona. This category encompasses workers with a wide range of skills and responsibilities and includes such numerically prominent occupations as truck drivers, welders, underground loading machine operators, and laborers.

Ranking a distant second and third to the maintenance and production category are professional and technical workers (14 percent) and those in clerical occupations (8 percent). Two of every three professional and technical workers in Arizona's mining industry are engineers and/or

FIGURE 9: OCCUPATIONS IN MINING - MAY 1984



scientists. Most numerous among the scientists are geologists. These workers help locate mineral deposits and their responsibilities often include the preparation of geologic reports and maps and the interpretation of research data. Mining engineers are primarily involved in determining the location of minerals and ores, and planning their extraction. Metallurgists and metallurgical engineers, on the other hand, investigate properties and treatments of metals to develop new alloys, production methods, and uses for the metals and alloys. Often assisting the geologists and engineers are the chemical technicians, who numbered 150 in May 1984.

FIGURE 10: PROFESSIONAL AND TECHNICAL OCCUPATIONS WITH THE GREATEST EMPLOYMENT

Occupation	Employment May 1984
Geologists and Geophysicists	216
Chemical Technicians and Technologists	152
Metallurgical and Materials Engineers	119
Mining Engineers, Incl. Mine Safety	117
Accountants and Auditors	110
Chemists, Inc. Biochemists	79
Drafters	64

FIGURE 11: OCCUPATIONS WITH THE GREATEST EMPLOYMENT
IN ARIZONA'S MINING INDUSTRY

	Employment 1984	Job Openings* 1984-1988
Miscellaneous Helpers & Laborers	740	-73
Truck Drivers, Heavy or Tractor Trailer	591	-91
Welders & Cutters	492	-45
Loading Machine Operators, Underground Mining	491	-46
Electricians	490	-66
First Line Managers/Supervisors-Construction		
Trades & Extraction Workers	483	-49
Machinery Maintenance Mechanics	463	-94
First Line Managers/Supervisors-Mechanics/		
Installers/Repairers	413	-63
Mobile Heavy Equipment Mechanics, Exc. Engines	395	-52
Crushing, Grinding, & Mixing Machine Operators	321	-28
Construction & Extraction Worker Helpers	270	-14
Blasters & Explosives Workers	260	-57
Excavating & Loading Machine Operators	252	-19
Geologists, Geophysicists, & Oceanographers	216	-39
Grader, Dozer, & Scraper Operators	210	-32
Secretaries	207	-10
First Line Managers/Supervisors-Transport		
Operatives	203	-21
Bus & Truck Mechanics, & Diesel Engine Specialists	197	-38
Mechanic & Repairer Helpers	191	-36
Plumbers, Pipefitters, & Steamfitters	187	-38
Separating & Filtering Machine Operators	185	-27
Earth Drillers, Exc. Oil & Gas	184	-6
Bookkeeping, Accounting, & Auditing Clerks	169	-20
Machinery Maintenance Workers	166	-16
Chemical Technicians, Exc. Health	152	-29
Maintenance Repairers, General Utility	152	-29
General Office Clerks	151	-6
Stock Clerks-Stockroom, Warehouse, or Yard	148	-17
Rail-Track Laying & Maintenance Equip. Operators	129	-23
Mining, Quarrying, & Drilling Managers	124	-12

* Does not include turnover.

In the clerical workers category, employment of secretaries; bookkeepers, accounting, and auditing clerks; and general office clerks constitutes one-half of the total.

The occupational employment distribution within each of the four major industry categories (oil and gas extraction, metal, non-metal, and coal mining) is similar to that shown in figure 9--with one exception. With a disproportionate share of managers, engineers, scientists, and technicians, the ranks of professional and technical personnel in oil and gas extraction account for more than 60 percent of the industry's employment. Even less labor intensive than its mining counterparts, only 18 percent are production and maintenance workers as compared to 73 percent for all mining firms.

Predicted declines in mining through 1988 will result in employment losses in nearly all occupations. Production, maintenance, and material handling occupations will, because of their large share of industry employment, experience the greatest employment declines. Compounding losses in this occupational category are technological advances that have yielded increased productivity. Evidence of this evolution is suggested by data presented in figure 12 which reflects mining staffing patterns as determined by each of the three OES surveys since 1978. A declining share of production and maintenance workers is countered by expanding shares of professional and technical workers as well as managerial and clerical personnel. Although their employment will decline during the projection period, professional and technical workers are expected to continue increasing their share of industry employment. Employment of engineers, scientists, and technical workers, for example, will be boosted by more technologically advanced mining systems, compliance with mine health and safety regulations, and reclamation efforts. Exploration and efforts to efficiently mine lower-grade ores will contribute to the demand for these workers, in the long term, as will the processing of these ores into usable metals.

Despite employment losses in the industry, job openings will be created as the result of turnover and separations from the labor force. Modest in number, these openings will be especially evident among clerical workers--a category that is characterized by relatively high separation and turnover rates.

FIGURE 12: OCCUPATIONAL EMPLOYMENT DISTRIBUTION
IN ARIZONA'S MINING INDUSTRY

Occupations	1978	1981	1984
Managerial & Administrative	10.2%	10.7%	13.9%
Professional, Paraprof., & Tech.	3.1	3.0	3.4
Sales	.2	.0	.2
Clerical/Administrative Support	5.7	6.5	7.7
Service	2.4	1.4	1.2
Production & Maintenance	79.4	78.4	73.6
Total	100.0%	100.0%	100.0%

OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. Graham and Greenlee counties have been combined due to their close proximity, similar economies, and size. Tables are not provided for Apache, Coconino, La Paz, Santa Cruz, and Yuma counties as each has insignificant employment in mining. When using the data, please note the following:

- 1) Employment growth for mines in each of the nonmetropolitan counties reflects the rate calculated for the "balance of state" (Arizona less Maricopa and Pima counties). Projected employment for the mines in Yavapai County, for example, reflects levels that would be attained if these mines were to expand at the rate that is predicted for all mines in the "balance of state."
- 2) The data reflect full- and part-time wage and salary employment only, and do not include self-employed or unpaid-family workers.
- 3) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.
- 4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "All Other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.
- 5) The projection technique does not possess the degree of accuracy that may be implied by unrounded numbers.
- 6) Data for occupations with employment of less than five are included in the appropriate "All Other" categories. These occupations are not listed, however, in the summary of "All Other" categories which follows each table.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

STATEWIDE

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF TOTAL MINING EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	434	3.4	328	-84
Financial Managers	37	.3	30	-7
Personnel, Training, & Labor Relations Mgrs.	35	.3	24	-10
Purchasing Managers	10	.1	4	-6
Marketing, Advertising, & Public Rel. Mgrs.	5	.0	2	-3
Administrative Services Managers	26	.2	15	-10
Mining, Quarrying, & Drilling Managers	124	1.0	103	-12
General Managers & Top Executives	101	.8	77	-20
All Other Managers & Administrators	96	.7	73	-16
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1,808	13.9	1,343	-375
Management Support Occupations	313	2.4	234	-59
Accountants & Auditors	110	.8	85	-16
Budget Analysts	8	.1	4	-4
All Other Financial Specialists	7	.1	7	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	56	.4	44	-9
Personnel, Training, & Labor Rel. Specialists	52	.4	38	-12
Compliance & Enforcement Inspectors, Exc. Const.	13	.1	8	-4
All Other Management Support Workers	33	.3	25	-6
	34	.3	23	-8
Engineers & Related Occupations	665	5.1	491	-144
Metallurgical & Materials Engineers	119	.9	86	-31
Mining Engineers, Incl. Mine Safety	117	.9	85	-21
Civil Engineers, Incl. Traffic	11	.1	6	-5
Mechanical Engineers	62	.5	44	-16
All Other Engineers	52	.4	39	-12
Surveying & Mapping Scientists	39	.3	27	-12
Civil Engineering Technicians & Technologists	12	.1	8	-3
Mechanical Engineering Techs.	10	.1	6	-4
Drafters	64	.5	49	-13
Surveying & Mapping Techs.	44	.3	37	-7
All Other Engineering & Related Technicians	135	1.0	104	-20
Natural Scientists & Related Workers	516	4.0	394	-98
Chemists, Exc. Biochemists	79	.6	55	-17
Geologists, Geophysicists, & Oceanographers	216	1.7	173	-39
All Other Physical Scientists	10	.1	6	-4
Foresters & Conservation Scientists	11	.1	13	2
All Other Life Scientists	2	.0	2	0
Chemical Techs., Exc. Health	152	1.2	111	-29
All Other Physical & Life Science Techs.	46	.4	34	-11
Computer, Math, Research, & Related Occupations	113	.9	82	-31
Systems Analysts, Electronic Data Processing	49	.4	38	-11
Computer Programmers	49	.4	35	-14
Computer Programmer Aides	13	.1	8	-5
All Mathematical Scientists	2	.0	1	-1
All Legal Assistants/Techs., Exc. Clerical	2	.0	1	-1
Health Practitioners, Techs., & Related Occupations	80	.6	52	-17
Registered Nurses	38	.3	25	-8
All Other Health Professionals, Paraprofessionals, & Technicians	42	.3	27	-9
Other Professional, Paraprofessional, & Related	119	.9	89	-25
SALES & RELATED OCCUPATIONS	32	.2	25	-6
First Line Supervisors & Managers - Sales	17	.1	13	-3
All Other Sales & Related Workers	15	.1	12	-3

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF TOTAL MINING EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	1,000	7.7	750	-141
First Line Supers.-Clerical & Admin. Support	71	.5	55	-10
Secretaries	207	1.6	163	-10
Receptionists & Information Clerks	14	.1	8	-6
Typists	16	.1	10	-4
Typists, Word Processing Equipment	11	.1	8	-3
Personnel Clerks, Exc. Payroll & Timekeeping	22	.2	14	-5
File Clerks	7	.1	5	-1
Bookkeeping, Accounting, & Auditing Clerks	169	1.3	127	-20
Payroll & Timekeeping Clerks	36	.3	24	-9
Billing, Cost & Rate Clerks	11	.1	6	-5
General Office Clerks	151	1.2	121	-6
Computer Operators, Exc. Peripheral Equipment	25	.2	16	-9
Data Entry Keyers, Exc. Composing	24	.2	16	-8
All Other Office Machine Operators	3	.0	1	-2
Switchboard Operators	12	.1	6	-6
Production, Planning, & Expediting Clerks	12	.1	7	-4
Weighers/Measurers/Checkers-Recordkeeping	35	.3	25	-9
Stock Clerks - Stockroom, Warehouse, or Yard	148	1.1	119	-17
All Other Material Recording/Scheduling/Dist.	12	.1	8	-4
All Other Clerical & Administrative Support	14	.1	11	-3
SERVICE OCCUPATIONS	161	1.2	115	-39
First Line Supers. & Mgrs./Supers. - Service	6	.0	3	-3
Guards & Watch Guards	97	.7	72	-23
All Food Service Workers	3	.0	0	-3
Janitors & Cleaners, Exc. Maids & Housekeeping	48	.4	35	-8
All Other Cleaning/Building Service, Exc.				
Private House	2	.0	2	0
All Other Service Workers	5	.0	3	-2
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	16	.1	17	2
Gardeners & Groundskeepers, Exc. Farm	11	.1	11	1
All Other Agri., Forestry, Fishing, & Related	5	.0	6	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	9,561	73.5	7,506	-1,323
First Line Supervisors & Manager/Supervisors	1,212	9.3	925	-147
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	413	3.2	299	-63
First Line Managers/Supervisors - Construction Trades & Extraction Workers	483	3.7	395	-49
First Line Mgrs./Supers. - Transport. Operatives	203	1.6	149	-21
First Line Mgrs./Supers. - Laborers & Helpers	78	.6	57	-9
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	35	.3	25	-5
Inspectors & Related Occupations	69	.5	48	-17
Mechanics, Installers, & Repairers	1,630	12.5	1,248	-283
Underground Mine Machinery Mechanics	169	1.3	132	-24
All Other Machinery Maintenance Mechanics	294	2.3	211	-70
Millwrights	20	.2	14	-4
Machinery Maintenance Workers	166	1.3	135	-16
Maintenance Repairers, General Utility	152	1.2	114	-29
Automotive Mechanics	55	.4	38	-15
Bus & Truck Mechs., & Diesel Eng. Specialists	197	1.5	147	-38
Mobile Heavy Equip. Mechanics, Exc. Engines	395	3.0	326	-52
Rail Car Repairers	70	.5	49	-12
Riggers	27	.2	19	-6
All Other Mechanics, Installers, & Repairers	85	.7	63	-17
Construction Trades & Extraction	1,661	12.8	1,288	-248
Carpenters	50	.4	35	-12

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

STATEWIDE (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF TOTAL MINING EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Electricians	490	3.8	383	-66
Painters & Paperhangers - Construction & Maintenance	21	.2	14	-6
Plumbers, Pipefitters, & Steamfitters	187	1.4	134	-38
Rail-Track Laying & Maintenance Equip. Oper.	129	1.0	92	-23
All Other Construction Trades Workers	6	.0	3	-3
Earth Drillers, Exc. Oil & Gas	184	1.4	170	-6
Blasters & Explosives Workers	260	2.0	188	-57
Roof Bolters	67	.5	49	-11
Continuous Mining Machine Operators	41	.3	30	-7
Mine Cutting & Channeling Machine Operators	117	.9	87	-19
All Other Mining Machine Operators	56	.4	41	-11
All Other Extractive Workers, Exc. Helpers	53	.4	62	11
Precision Production Occupations	106	.8	75	-24
Machinists	98	.7	70	-21
All Other Precision Workers	8	.1	5	-3
Machine Setters, Operators, & Tenders	626	4.8	492	-82
All Metal & Plastic Machine Operators	2	.0	1	-1
Furnace, Kiln, Oven, Drier, or Kettle Operators	78	.6	58	-12
Boiler Operators & Tenders, Low Pressure	13	.1	8	-5
Cleaning, Washing, & Pickling Equipment Operators	15	.1	11	-4
Separating & Filtering Machine Operators	185	1.4	141	-27
Crushing, Grinding, & Mixing Machine Operators	321	2.5	266	-28
All Other Machine Operators & Tenders	12	.1	7	-5
Hand Working Occupations, Inc. Assemblers & Fabricators	657	5.0	529	-74
Welders & Cutters	492	3.8	409	-45
Solderers & Brazers	5	.0	3	-2
All Other Hand Workers	160	1.2	117	-27
Plant & System Occupations	139	1.1	103	-24
Stationary Engineers	123	.9	93	-19
All Other Plant & System Operators	16	.1	10	-5
Transportation & Material Moving Workers	2,236	17.2	1,808	-302
Truck Drivers, Heavy or Tractor Trailer	591	4.5	470	-91
Truck Drivers, Light - Incl. Delivery & Route	18	.1	11	-7
Rail Yard Engineers, Dinkey Oper. & Hostlers	19	.1	12	-5
Railroad Brake, Signal, & Switch Operators	26	.2	17	-9
All Other Rail Vehicle Oper. & Controllers	37	.3	25	-10
All Other Transportation & Related Workers	108	.8	79	-19
Excavating & Loading Machine Operators	252	1.9	215	-19
Loading Machine Operators, Underground Mining	491	3.8	425	-46
Shuttle Car Operators	44	.3	32	-8
Grader, Dozer, & Scraper Operators	210	1.6	159	-32
Hoist & Winch Operators	20	.2	15	-5
Crane & Tower Operators	116	.9	84	-27
Industrial Truck & Tractor Operators	51	.4	36	-14
Conveyor Operators & Tenders	79	.6	89	17
Pump Operators	25	.2	18	-7
Operating Engineers	89	.7	77	-8
All Other Material Moving Equipment Operators	60	.5	44	-12
Helpers, Laborers, & Material Movers, Hand	1,225	9.4	990	-122
Mechanic & Repairer Helpers	191	1.5	137	-36
Construction & Extraction Worker Helpers	270	2.1	234	-14
Freight, Stock, & Material Movers, Hand	24	.2	24	1
All Other Helpers & Laborers	740	5.7	595	-73
TOTAL ALL OCCUPATIONS	13,012	100.0	10,084	1,966

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

STATEWIDE (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineers
Petroleum Engineers

All Other Health Professionals,
Paraprofessionals, & technicians
Licensed Practical Nurses

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mining Machine Operators
Paving, Surfacing, & Tamping Equip. Oper.

All Other Extractive Workers, Exc. Helpers
Rock Splitters, Quarry

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

COCHISE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	8	8	0	0	0
Mining, Quarrying, & Drilling Managers	5	5	0	0	0
All Other Managers & Administrators	3	3	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	17	18	1	0	1
All Financial Specialists	1	1	0	0	0
All Other Management Support Workers	2	2	0	0	0
All Engineers	2	2	0	0	0
All Physical Scientists	3	3	0	0	0
All Physical & Life Science Techs.	9	10	1	0	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	6	6	0	0	0
Secretaries	2	2	0	0	0
All Office Machine Operators	1	1	0	0	0
All Other Clerical & Administrative Support	3	3	0	0	0
SERVICE OCCUPATIONS	5	5	0	0	0
All Protective Service Workers	3	3	0	0	0
All Cleaning/Building Service, Exc. Private House	2	2	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	7	8	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	169	196	27	10	37
All First Line Managers/Supervisors - Maintenance/Production/Construction	5	5	0	0	0
All Mechanics, Installers, & Repairers	6	6	0	0	0
All Mining Machine Operators	4	4	0	0	0
All Other Extractive Workers, Exc. Helpers	4	4	0	0	0
All Other Machine Operators & Tenders	30	36	6	2	8
All Motor Vehicle Operators	5	6	1	0	1
All Other Material Moving Equipment Operators	60	70	10	3	13
All Helpers & Laborers	55	65	10	5	15
TOTAL ALL OCCUPATIONS	212	241	29	11	40

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Physical & Life Science Techs.
Chemical Techs., Exc. Health

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

Gardeners & Groundskeepers, Exc. Farm

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Machine Operators & Tenders
Separating & Filtering Machine Operators
Crushing, Grinding, & Mixing Machine Operators

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Motor Vehicle Operators
Truck Drivers, Heavy or Tractor Trailer

All Other Material Moving Equipment Operators
Excavating & Loading Machine
Loading Machine Operators, Underground
Operating Engineers

All Helpers & Laborers
Construction & Extraction Worker Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

GILA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	54	35	-19	3	-16
Personnel, Training, & Labor Relations Mgrs.	8	5	-3	0	-3
Mining, Quarrying, & Drilling Managers	14	10	-4	1	-3
General Managers & Top Executives	7	5	-2	0	-2
All Other Managers & Administrators	25	15	-10	2	-8
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	228	150	-78	11	-67
Accountants & Auditors	16	11	-5	2	-3
All Other Financial Specialists	2	1	-1	0	-1
Cost Estimators	9	6	-3	1	-2
All Other Management Support Workers	14	8	-6	0	-6
Metallurgical & Materials Engineers	17	12	-5	0	-5
Mining Engineers, Incl. Mine Safety	15	10	-5	2	-3
All Other Engineers	26	17	-9	1	-8
Surveying & Mapping Scientists	7	5	-2	0	-2
Surveying & Mapping Techs.	9	6	-3	0	-3
All Other Engineering & Related Technicians	13	8	-5	0	-5
Geologists, Geophysicists, & Oceanographers	16	10	-6	0	-6
All Other Physical Scientists	12	8	-4	1	-3
Chemical Techs., Exc. Health	49	35	-14	4	-10
All Other Physical & Life Science Techs.	2	1	-1	0	-1
Systems Analysts, Electronic Data Processing	5	3	-2	0	-2
Computer Programmers	10	7	-3	0	-3
All Health Professionals,					
Paraprofessionals, & Technicians	3	1	-2	0	-2
All Other Professional, Paraprofessional,					
& Technical Workers	3	1	-2	0	-2
SALES & RELATED OCCUPATIONS	14	9	-5	1	-4
First Line Supervisors & Managers - Sales	8	5	-3	1	-2
All Other Sales & Related Workers	6	4	-2	0	-2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	158	107	-51	19	-32
First Line Supers.-Clerical & Admin. Support	17	12	-5	3	-2
Secretaries	17	11	-6	3	-3
Personnel Clerks, Exc. Payroll & Timekeeping	11	8	-3	2	-1
Bookkeeping, Accounting, & Auditing Clerks	6	4	-2	1	-1
Billing, Cost & Rate Clerks	5	3	-2	0	-2
General Office Clerks	32	23	-9	6	-3
All Office Machine Operators	4	2	-2	0	-2
All Communication Equipment Operators	3	2	-1	0	-1
Production, Planning, & Expediting Clerks	5	3	-2	0	-2
Weights/Measurers/Checkers - Recordkeeping	13	9	-4	1	-3
Stock Clerks - Stockroom, Warehouse, or Yard	27	19	-8	2	-6
All Other Material Recording/Scheduling/Dist.	5	3	-2	0	-2
All Other Clerical & Administrative Support	13	8	-5	1	-4
SERVICE OCCUPATIONS	15	10	-5	0	-5
All Service Supervisors & Managers	3	2	-1	0	-1
Guards & Watch Guards	7	5	-2	0	-2
Janitors & Cleaners, Exc. Maids & Housekeeping	5	3	-2	0	-2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,345	966	-379	106	-273
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	65	47	-18	8	-10
First Line Mgrs./Supers. - Transport. Operatives	19	13	-6	3	-3
First Line Mgrs./Supers. - Laborers & Helpers	54	39	-15	9	-6
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	53	38	-15	5	-10
All Inspectors, Testers, & Related	4	2	-2	0	-2
All Machinery Maintenance Mechanics	65	46	-19	3	-16
Maintenance Repairers, General Utility	6	4	-2	0	-2
Bus & Truck Mechs., & Diesel Eng. Specialists	29	21	-8	2	-6

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

GILA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Mobile Heavy Equip. Mechanics, Exc. Engines	68	49	-19	3	-16
Rail Car Repairers	5	3	-2	0	-2
Riggers	11	8	-3	1	-2
All Other Mechanics, Installers, & Repairers	65	47	-18	6	-12
Carpenters	19	13	-6	2	-4
Electricians	81	59	-22	7	-15
Plumbers, Pipefitters, & Steamfitters	51	37	-14	4	-10
All Other Construction Trades Workers	5	3	-2	0	-2
Earth Drillers, Exc. Oil & Gas	12	8	-4	0	-4
Blasters & Explosives Workers	5	3	-2	0	-2
All Other Extraction Workers, Exc. Helpers	10	9	-1	0	-1
Machinists	30	21	-9	2	-7
All Other Precision Workers	8	5	-3	0	-3
Cleaning, Washing, & Pickling Equipment Oper.	6	4	-2	0	-2
Separating & Filtering Machine Operators	60	43	-17	6	-11
Crushing, Grinding, & Mixing Machine Operators	91	67	-24	9	-15
All Other Machine Operators & Tenders	4	2	-2	0	-2
Welders & Cutters	68	49	-19	5	-14
All Plant & System Operators	7	5	-2	0	-2
Truck Drivers, Heavy or Tractor Trailer	135	101	-34	8	-26
Truck Drivers, Light - Incl. Delivery & Route	14	10	-4	0	-4
Railroad Brake, Signal, & Switch Operators	7	5	-2	0	-2
All Other Rail Vehicle Oper. & Controllers	5	3	-2	0	-2
Excavating & Loading Machine Operators	19	13	-6	1	-5
Crane & Tower Operators	9	6	-3	0	-3
Pump Operators	5	3	-2	0	-2
Operating Engineers	6	4	-2	0	-2
All Other Material Moving Equipment Operators	102	73	-29	8	-21
All Other Helpers & Laborers	142	103	-39	14	-25
TOTAL ALL OCCUPATIONS	1,814	1,277	-537	140	-397

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Personnel, Training, & Labor Rel. Specialists

All Other Engineers
Mechanical Engineers

All Other Physical Scientists
Chemists, Exc. Biochemists

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Payroll & Timekeeping Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors -
Maintenance/Production/Construction

PRODUCTION, MAINTENANCE, MATERIAL HANDLING (CONTD.)

First Line Managers/Supervisors - Construction
Trades and Extraction Workers

All Other Mechanics, Installers, & Repairers
Machinery Maintenance Workers

All-Other Extraction Workers, Exc. Helpers
Rock Splitters, Quarry

All Plant & System Operators
Stationary Engineers

All Other Material Moving Equipment Operators
Grader, Dozer, & Scraper Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

GRAHAM & GREENLEE COUNTIES

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	16	7	-9	0	-9
All Managers & Administrators	16	7	-9	0	-9
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	206	135	-71	10	-61
Accountants & Auditors	8	5	-3	0	-3
All Other Financial Specialists	2	1	-1	0	-1
Personnel, Training, & Labor Rel. Specialists	12	8	-4	1	-3
Compliance & Enforcement Inspectors, Exc. Const.	13	8	-5	1	-4
All Other Management Support Workers	4	2	-2	0	-2
Metallurgical & Materials Engineers	10	7	-3	0	-3
Mining Engineers, Incl. Mine Safety	7	4	-3	0	-3
All Other Engineers	4	2	-2	0	-2
Surveying & Mapping Techs.	12	8	-4	0	-4
All Other Engineering & Related Technicians	20	13	-7	1	-6
Chemists, Exc. Biochemists	6	4	-2	0	-2
Geologists, Geophysicists, & Oceanographers	6	3	-3	0	-3
All Other Physical Scientists	5	3	-2	0	-2
Chemical Techs., Exc. Health	8	5	-3	0	-3
All Other Physical & Life Science Techs.	4	2	-2	0	-2
Systems Analysts, Electronic Data Processing	7	5	-2	0	-2
Registered Nurses	18	13	-5	3	-2
All Other Health Professionals, Paraprofessionals, & Technicians	5	3	-2	1	-1
All Other Professional, Paraprofessional, & Technical Workers	55	39	-16	3	-13
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	98	63	-35	13	-22
Secretaries	27	19	-8	5	-3
Bookkeeping, Accounting, & Auditing Clerks	49	35	-14	8	-6
All Office Machine Operators	3	1	-2	0	-2
All Communication Equipment Operators	1	0	-1	0	-1
All Material Recording/Scheduling/Dist.	8	4	-4	0	-4
All Other Clerical & Administrative Support	10	4	-6	0	-6
SERVICE OCCUPATIONS	49	33	-16	4	-12
Guards & Watch Guards	29	20	-9	1	-8
All Food Service Workers	1	0	-1	0	-1
Janitors & Cleaners, Exc. Maids & Housekeeping	19	13	-6	3	-3
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,385	992	-393	126	-267
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	82	59	-23	10	-13
First Line Mgrs./Supers. - Transport. Operatives	99	72	-27	17	-10
First Line Mgrs./Supers. - Laborers & Helpers	8	5	-3	1	-2
All Machinery Maintenance Mechanics	17	11	-6	0	-6
Maintenance Repairers, General Utility	70	51	-19	5	-14
Automotive Mechanics	28	20	-8	1	-7
Bus & Truck Mechs., & Diesel Eng. Specialists	47	34	-13	3	-10
Mobile Heavy Equip. Mechanics, Exc. Engines	47	34	-13	2	-11
Rail Car Repairers	20	14	-6	3	-3
Carpenters	5	3	-2	0	-2
Electricians	65	47	-18	5	-13
Plumbers, Pipefitters, & Steamfitters	12	8	-4	1	-3
Rail-Track Laying & Maintenance Equip. Opers.	66	48	-18	8	-10
All Other Construction Trades Workers	3	2	-1	0	-1
Earth Drillers, Exc. Oil & Gas	28	20	-8	1	-7
Blasters & Explosives Workers	16	11	-5	1	-4
Mine Cutting & Channeling Machine Operators	32	23	-9	3	-6
All Precision Metal Workers	3	1	-2	0	-2
Welders & Cutters	97	70	-27	7	-20
Stationary Engineers	62	45	-17	6	-11
Truck Drivers, Heavy or Tractor Trailer	69	50	-19	4	-15
All Rail Vehicle Opers. & Related Workers	15	9	-6	0	-6

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

GRAHAM & GREENLEE COUNTIES (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH <u>1984-1988</u>	JOB OPENINGS DUE TO SEPARATIONS <u>1984-1988</u>	TOTAL JOB OPENINGS <u>1984-1988</u>
All Other Transportation & Related Workers	72	52	-20	7	-13
Excavating & Loading Machine Operators	30	21	-9	3	-6
Grader, Dozer, & Scraper Operators	32	22	-10	3	-7
Crane & Tower Operators	18	13	-5	1	-4
Industrial Truck & Tractor Operators	8	5	-3	0	-3
All Other Material Moving Equipment Operators	2	0	-2	0	-2
Mechanic & Repairer Helpers	117	85	-32	12	-20
All Other Helpers & Laborers	215	157	-58	22	-36
TOTAL ALL OCCUPATIONS	1,754	1,230	-524	153	-371

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

MARICOPA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	50	50	0	0	0
Financial Managers	10	10	0	0	0
General Managers & Top Executives	18	18	0	0	0
All Other Managers & Administrators	22	22	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	151	154	3	4	7
Accountants & Auditors	22	23	1	2	3
All Other Financial Specialists	7	7	0	0	0
All Other Management Support Workers	18	19	1	1	2
All Engineers	26	26	0	0	0
Drafters	17	18	1	1	2
All Other Engineering & Related Technicians	4	4	0	0	0
All Physical Scientists	16	16	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	41	41	0	0	0
SALES & RELATED OCCUPATIONS	8	8	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	103	104	1	10	11
Secretaries	37	38	1	7	8
Typists, Word Processing Equipment	5	5	0	0	0
General Office Clerks	20	20	0	3	3
All Office Machine Operators	2	2	0	0	0
All Communication Equipment Operators	2	2	0	0	0
All Material Recording/Scheduling/Dist.	5	5	0	0	0
All Other Clerical & Administrative Support	32	32	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	153	156	3	3	6
First Line Managers/Supervisors - Construction Trades & Extraction Workers	24	25	1	1	2
All Machinery Maintenance Mechanics	1	1	0	0	0
Mobile Heavy Equip. Mechanics, Exc. Engines	5	5	0	0	0
All Other Mechanics, Installers, & Repairers	15	15	0	0	0
All Construction Trades Workers	2	2	0	0	0
All Mining Machine Operators	15	15	0	0	0
Crushing, Grinding, & Mixing Machine Operators	24	25	1	1	2
All Hand Workers	2	2	0	0	0
Truck Drivers, Heavy or Tractor Trailer	20	21	1	0	1
All Other Motor Vehicle Operators	1	1	0	0	0
Excavating & Loading Machine Operators	20	20	0	1	1
All Other Material Moving Equipment Operators	9	9	0	0	0
All Other Helpers & Laborers	15	15	0	0	0
TOTAL ALL OCCUPATIONS	465	472	7	17	24

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Purchasing Agents, Exc. Wholesale, Retail,
& Farm

All Engineers
Metallurgical & Materials Engineers
Petroleum Engineers
Mechanical Engineers

All Physical Scientists
Geologists, Geophysicists, & Oceanographers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Other Professional, Paraprofessional,
& Technical Workers
Computer Programmers

SALES & RELATED OCCUPATIONS

Other Sales Representatives, Exc. Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Bookkeeping, Accounting, & Auditing Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

MARICOPA COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Mining Machine Operators
Paving, Surfacing, & Tamping Equip. Oper.
Furnace, Kiln, Oven, Drier, or Kettle Oper.

All Other Material Moving Equipment Operators
Hoist & Winch Operators

All Other Helpers & Laborers
Construction & Extraction Worker Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

MOHAVE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	7	7	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	85	39	4	0	4
All Financial Specialists	1	1	0	0	0
All Other Management Support Workers	2	2	0	0	0
All Engineers	4	4	0	0	0
All Engineering & Related Technicians	8	9	1	0	1
All Physical Scientists	14	16	2	0	2
All Physical & Life Science Techs.	6	7	1	0	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	14	14	0	0	0
Secretaries	4	4	0	0	0
All Material Recording/Scheduling/Dist.	4	4	0	0	0
All Other Clerical & Administrative Support	6	6	0	0	0
SERVICE OCCUPATIONS	6	6	0	0	0
Guards & Watch Guards	6	6	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	141	160	19	3	22
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	12	14	2	0	2
All Machinery Maintenance Mechanics	12	14	2	1	3
All Other Mechanics, Installers, & Repairers	16	17	1	0	1
All Construction Trades Workers	8	9	1	0	1
All Extractive Workers, Except Helpers	56	66	10	2	12
All Machine Operators & Tenders	5	5	0	0	0
All Hand Workers	8	9	1	0	1
All Motor Vehicle Operators	4	4	0	0	0
All Other Transportation & Moving					
Equipment Operators	12	13	1	0	1
All Other Helpers & Laborers	8	9	1	0	1
TOTAL ALL OCCUPATIONS	203	226	23	3	26

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineering & Related Technicians
Surveying & Mapping Techs.

All Physical Scientists
Geologists, Geophysicists, & Oceanographers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Machinery Maintenance Mechanics
Underground Mine Machinery Mechanics

All Other Mechanics, Installers, & Repairers
Bus & Truck Mechs., & Diesel Eng. Specialists
Mobile Heavy Equip. Mechanics, Exc. Engines

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Construction Trades Workers
Electricians

All Extractive Workers, Exc. Helpers
Earth Drillers, Exc. Oil & Gas
Mine Cutting & Channeling Machine Operators

All Hand Workers
Welders & Cutters

All Other Transportation & Moving Equip. Operators
Excavating & Loading Machine Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

NAVAJO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	38	44	6	2	8
Financial Managers	5	6	1	0	1
Mining, Quarrying, & Drilling Managers	21	25	4	2	6
All Other Managers & Administrators	12	13	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	90	101	11	2	13
All Financial Specialists	4	4	0	0	0
Compliance & Enforcement Inspectors, Exc. Const.	6	7	1	0	1
All Other Management Support Workers	8	8	0	0	0
Mining Engineers, Incl. Mine Safety	5	6	1	0	1
All Other Engineers	4	4	0	0	0
Surveying & Mapping Techs.	10	12	2	0	2
All Other Engineering & Related Technicians	19	23	4	2	6
All Physical Scientists	4	4	0	0	0
Foresters & Conservation Scientists	11	13	2	0	2
All Other Life Scientists	2	2	0	0	0
All Other Physical & Life Science Techs.	5	5	0	0	0
All Mathematical Scientists	1	1	0	0	0
All Health Professionals, Paraprofessionals, & Technicians	2	2	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	9	10	1	0	1
SALES & RELATED OCCUPATIONS	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	88	101	13	9	22
First Line Supers.-Clerical & Admin. Support	11	13	2	1	3
Secretaries	11	12	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	6	7	1	1	2
General Office Clerks	15	17	2	3	5
All Office Machine Operators	4	4	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	32	38	6	3	9
All Other Material Recording/Scheduling/Dist.	2	2	0	0	0
All Other Clerical & Administrative Support	7	8	1	0	1
SERVICE OCCUPATIONS	5	6	1	0	1
Janitors & Cleaners, Exc. Maids & Housekeeping	5	6	1	0	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	6	7	1	0	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	873	1,043	170	68	238
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	62	75	13	6	19
First Line Mgrs./Supers. - Transport. Operatives	9	10	1	1	2
First Line Mgrs./Supers. - Laborers & Helpers	7	8	1	1	2
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	5	5	0	0	0
Production Inspectors, Testers, & Graders	5	6	1	0	1
Underground Mine Machinery Mechanics	11	13	2	1	3
Machinery Maintenance Workers	31	37	6	3	9
Mobile Heavy Equip. Mechanics, Exc. Engines	78	94	16	4	20
All Other Mechanics, Installers, & Repairers	11	12	1	0	1
Electricians	53	64	11	5	16
Earth Drillers, Exc. Oil & Gas	69	83	14	5	19
Rock Splitters, Quarry	3	3	0	0	0
Machinists	5	6	1	0	1
All Other Machine Operators & Tenders	4	4	0	0	0
Welders & Cutters	107	129	22	10	32
Stationary Engineers	11	13	2	1	3
Truck Drivers, Heavy or Tractor Trailer	22	25	3	0	3
All Other Transportation & Related Workers	4	4	0	0	0
Excavating & Loading Machine Operators	37	44	7	3	10
Loading Machine Operators, Underground Mining	113	137	24	5	29

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

NAVAJO COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Grader, Dozer, & Scraper Operators	20	24	4	2	6
Conveyor Operators & Tenders	68	81	13	7	20
Construction & Extraction Worker Helpers	51	61	10	5	15
Freight, Stock, & Material Movers, Hand	10	12	2	1	3
All Other Helpers & Laborers	77	93	16	8	24
TOTAL ALL OCCUPATIONS	1,101	1,303	202	81	283

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
 Bus & Truck Mechs., & Diesel Eng. Specialists

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PIMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	179	120	-59	15	-44
Financial Managers	11	7	-4	0	-4
Personnel, Training, & Labor Relations Mgrs.	12	8	-4	1	-3
Administrative Services Managers	12	7	-5	1	-4
Mining, Quarrying, & Drilling Managers	51	35	-16	5	-11
General Managers & Top Executives	47	31	-16	4	-12
All Other Managers & Administrators	46	32	-14	4	-10
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	781	538	-243	49	-194
Accountants & Auditors	45	32	-13	5	-8
All Other Financial Specialists	4	2	-2	0	-2
Purchasing Agents, Exc. Wholesale, Retail, & Farm	19	13	-6	2	-4
Personnel, Training, & Labor Rel. Specialists	18	13	-5	1	-4
Compliance & Enforcement Inspectors, Exc. Const.	13	9	-4	1	-3
All Other Management Support Workers	29	19	-10	3	-7
Metallurgical & Materials Engineers	55	39	-16	2	-14
Mining Engineers, Incl. Mine Safety	51	36	-15	6	-9
Mechanical Engineers	19	13	-6	1	-5
All Other Engineers	11	6	-5	0	-5
Surveying & Mapping Scientists	22	15	-7	0	-7
Drafters	30	20	-10	1	-9
Surveying & Mapping Techs.	8	5	-3	0	-3
All Other Engineering & Related Technicians	92	64	-28	8	-20
Chemists, Exc. Biochemists	39	28	-11	4	-7
Geologists, Geophysicists, & Oceanographers	114	83	-31	4	-27
All Other Physical Scientists	4	2	-2	0	-2
Chemical Techs., Exc. Health	73	52	-21	7	-14
All Other Physical & Life Science Techs.	29	20	-9	1	-8
Systems Analysts, Electronic Data Processing	20	14	-6	0	-6
Computer Programmers	21	12	-9	0	-9
Computer Programmer Aides	7	4	-3	0	-3
All Mathematical Scientists	1	0	-1	0	-1
All Legal Assistants/Techs., Exc. Clerical	1	0	-1	0	-1
All Health Professionals, Paraprofessionals, & Technicians	13	8	-5	1	-4
All Other Professional, Paraprofessional, & Technical Workers	43	29	-14	2	-12
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	336	220	-116	41	-75
First Line Supers.-Clerical & Admin. Support	15	10	-5	1	-4
Secretaries	88	62	-26	17	-9
Receptionists & Information Clerks	7	3	-4	0	-4
Personnel Clerks, Exc. Payroll & Timekeeping	5	3	-2	1	-1
Bookkeeping, Accounting, & Auditing Clerks	56	37	-19	8	-11
Payroll & Timekeeping Clerks	12	7	-5	1	-4
General Office Clerks	49	34	-15	8	-7
Computer Operators, Exc. Peripheral Equipment	15	9	-6	0	-6
Data Entry Keyers, Exc. Composing	15	10	-5	0	-5
Switchboard Operators	5	2	-3	0	-3
Stock Clerks - Stockroom, Warehouse, or Yard	32	22	-10	3	-7
All Other Material Recording/Scheduling/Dist.	16	10	-6	1	-5
All Other Clerical & Administrative Support	21	11	-10	1	-9
SERVICE OCCUPATIONS	47	31	-16	3	-13
All Service Supervisors & Managers	2	1	-1	0	-1
Guards & Watch Guards	31	21	-10	1	-9
All Food Service Workers	1	0	-1	0	-1
Janitors & Cleaners, Exc. Maids & Housekeeping	13	9	-4	2	-2
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1	0	-1	0	-1

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	2,003	1,410	-593	155	-438
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	125	90	-35	16	-19
First Line Managers/Supervisors - Construction Trades & Extraction Workers	114	80	-34	10	-24
First Line Mgrs./Supers. - Transport. Opers.	43	31	-12	7	-5
First Line Mgrs./Supers. - Laborers & Helpers	8	5	-3	1	-2
Production Inspectors, Testers, & Graders	27	18	-9	2	-7
All Other Inspectors, Testers, & Related	4	2	-2	0	-2
All Machinery Maintenance Mechanics	202	146	-56	10	-46
Machinery Maintenance Workers	26	18	-8	2	-6
Maintenance Repairers, General Utility	38	27	-11	3	-8
Bus & Truck Mechs., & Diesel Eng. Specialists	37	26	-11	2	-9
Mobile Heavy Equip. Mechanics, Exc. Engines	101	71	-30	5	-25
All Other Mechanics, Installers, & Repairers	30	20	-10	2	-8
Carpenters	7	5	-2	0	-2
Electricians	93	66	-27	8	-19
All Other Construction Trades Workers	7	4	-3	0	-3
Earth Drillers, Exc. Oil & Gas	37	26	-11	2	-9
Blasters & Explosives Workers	12	7	-5	0	-5
All Mining Machine Operators	44	31	-13	4	-9
Machinists	23	15	-8	2	-6
All Other Metal & Plastic Machine Operators	11	7	-4	0	-4
Separating & Filtering Machine Operators	79	57	-22	8	-14
All Other Machine Operators & Tenders	108	76	-32	10	-22
Welders & Cutters	177	127	-50	14	-36
All Plant & System Operators	44	30	-14	4	-10
Truck Drivers, Heavy or Tractor Trailer	169	121	-48	10	-38
All Other Motor Vehicle Operators	2	0	-2	0	-2
All Rail Vehicle Opers. & Controllers	11	6	-5	0	-5
All Other Transportation & Related Workers	32	23	-9	3	-6
Excavating & Loading Machine Operators	54	38	-16	5	-11
Grader, Dozer, & Scraper Operators	47	33	-14	4	-10
Crane & Tower Operators	13	9	-4	0	-4
All Other Transportation & Moving Equipment Operators	56	38	-18	2	-16
Mechanic & Repairer Helpers	54	38	-16	5	-11
All Other Helpers & Laborers	168	119	-49	14	-35
TOTAL ALL OCCUPATIONS	3,347	2,319	-1,028	263	-765

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineering & Related Technicians
Civil Engineering Technicians & Technologists
Mechanical Engineering Techs.

All Health Professionals,
Paraprofessionals, & Technicians
Registered Nurses

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Material Recording/Scheduling/Dist.
Production, Planning, & Expediting Clerks
Weighers, Measurers, Checkers, & Samplers-
Recordkeeping

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS (CONTD.)

All Other Clerical & Administrative Support
Typists, Word Processing Equipment
File Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Automotive Mechanics
Rail Car Repairers

All Other Mining Machine Operators
Rail-Track Laying & Maintenance Equip. Opers.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PIMA COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Metal & Plastic Machine Operators
Machine Tool Cutting Operators & Tenders - Metal
& Plastic

All Other Machine Operators & Tenders
Furnace, Kiln, Oven, Drier, or Kettle Opers.
Crushing, Grinding, & Mixing Machine Operators

All Plant & System Operators
Stationary Engineers

All Rail Vehicle Opers. & Controllers
Railroad Brake, Signal, & Switch Operators

All Other Transportation & Moving Equip. Operators
Industrial Truck & Tractor Operators
Pump Operators
Operating Engineers

All Other Helpers, Laborers, & Material Movers, Hand
Construction Trades & Extractive Worker Helpers
Freight, Stock, & Material Movers, Hand

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PINAL COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	59	42	-17	2	-15
Financial Managers	5	3	-2	0	-2
Personnel, Training, & Labor Relations Mgrs.	7	5	-2	0	-2
Mining, Quarrying, & Drilling Managers	19	16	-3	1	-2
General Managers & Top Executives	8	6	-2	0	-2
All Other Managers & Administrators	20	12	-8	1	-7
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	225	150	-75	13	-62
All Financial Specialists	7	5	-2	0	-2
Purchasing Agents, Exc. Wholesale, Retail, & Farm	7	5	-2	0	-2
Personnel, Training, & Labor Rel. Specialists	7	5	-2	0	-2
All Other Management Support Workers	1	0	-1	0	-1
Mining Engineers, Incl. Mine Safety	29	20	-9	3	-6
Civil Engineers, Incl. Traffic	5	3	-2	0	-2
All Other Engineers	58	40	-18	1	-17
All Engineering & Related Technicians	29	17	-12	1	-11
Geologists, Geophysicists, & Oceanographers	14	9	-5	0	-5
All Other Physical Scientists	20	14	-6	2	-4
All Other Physical & Life Science Techs.	11	8	-3	1	-2
Registered Nurses	8	5	-3	1	-2
Licensed Practical Nurses	5	3	-2	1	-1
All Other Health Professionals, Paraprofessionals, & Technicians	17	12	-5	3	-2
All Other Professional, Paraprofessional, & Technical Workers	7	4	-3	0	-3
SALES & RELATED OCCUPATIONS	6	5	-1	0	-1
First Line Supervisors & Managers - Sales	5	4	-1	0	-1
All Other Sales & Related Workers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	170	116	-54	18	-36
First Line Supers.-Clerical & Admin. Support	21	15	-6	2	-4
Secretaries	12	7	-5	1	-4
Typists	9	6	-3	2	-1
Bookkeeping, Accounting, & Auditing Clerks	29	22	-7	4	-3
General Office Clerks	23	17	-6	4	-2
All Office Machine Operators	8	4	-4	0	-4
All Communication Equipment Operators	1	0	-1	0	-1
Stock Clerks - Stockroom, Warehouse, or Yard	46	33	-13	4	-9
All Other Material Recording/Scheduling/Dist.	7	3	-4	0	-4
All Other Clerical & Administrative Support	14	9	-5	1	-4
SERVICE OCCUPATIONS	25	18	-7	0	-7
All Service Supervisors & Managers	1	0	-1	0	-1
Guards & Watch Guards	15	13	-2	0	-2
All Food Service Workers	1	0	-1	0	-1
Janitors & Cleaners, Exc. Maids & Housekeeping	6	4	-2	0	-2
All Other Service Workers	2	1	-1	0	-1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	3,204	2,335	-869	253	-616
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	127	92	-35	16	-19
First Line Mgrs./Supers. - Construction Trades & Extraction Workers	202	148	-54	18	-36
First Line Mgrs./Supers. - Transport. Operatives	31	22	-9	5	-4
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	25	17	-8	4	-4
All Inspectors, Testers, & Related	29	20	-9	2	-7
Underground Mine Machinery Mechanics	140	102	-38	11	-27
All Other Machinery Maintenance Mechanics	6	4	-2	0	-2

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PINAL COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Millwrights	20	14	-6	2	-4
Machinery Maintenance Workers	60	44	-16	6	-10
Maintenance Repairers, General Utility	19	14	-5	1	-4
Mobile Heavy Equip. Mechanics, Exc. Engines	75	54	-21	3	-18
Riggers	16	11	-5	1	-4
All Other Mechanics, Installers, & Repairers	154	110	-44	13	-31
Electricians	183	133	-50	16	-34
All Other Construction Trades Workers	145	104	-41	12	-29
Earth Drillers, Exc. Oil & Gas	17	11	-6	0	-6
Roof Bolters	67	49	-18	7	-11
Continuous Mining Machine Operators	41	30	-11	4	-7
Mine Cutting & Channeling Machine Operators	73	53	-20	8	-12
All Other Mining Machine Operators	64	45	-19	6	-13
Blasters & Explosives Workers	224	164	-60	14	-46
All Precision Metal Workers	37	27	-10	3	-7
Boiler Operators & Tenders, Low Pressure	9	6	-3	0	-3
Cleaning, Washing, & Pickling Equipment Operers.	7	5	-2	0	-2
Crushing, Grinding, & Mixing Machine Operators	64	51	-13	5	-8
All Other Machine Operators & Tenders	71	51	-20	7	-13
Solderers & Brazers	5	3	-2	0	-2
All Other Hand Workers	187	136	-51	18	-33
Stationary Engineers	14	10	-4	1	-3
All Motor Vehicle Operators	137	107	-30	7	-23
All Rail Vehicle Operers. & Controllers	44	31	-13	4	-9
Loading Machine Operators, Underground Mining	353	258	-95	14	-81
Shuttle Car Operators	44	32	-12	4	-8
Hoist & Winch Operators	10	7	-3	0	-3
Industrial Truck & Tractor Operators	24	17	-7	1	-6
All Other Transportation & Moving Equipment Operators	191	141	-50	13	-37
Construction & Extraction Worker Helpers	158	118	-40	15	-25
All Other Helpers & Laborers	131	94	-37	12	-25
TOTAL ALL OCCUPATIONS	3,691	2,668	-1,023	286	-737

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Accountants & Auditors

All Other Engineers
Metallurgical & Materials Engineers
Mechanical Engineers

All Engineering & Related Technicians
Surveying & Mapping Scientists
Drafters

All Other Physical Scientists
Chemists, Exc. Biochemists

All Other Physical & Life Science Techs.
Chemical Techs., Exc. Health

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Payroll & Timekeeping Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Inspectors, Testers, & Related
Production Inspectors, Testers, & Graders

All Other Mechanics, Installers, & Repairers
Automotive Mechanics
Bus & Truck Mechs., & Diesel Eng. Specialists
Rail Car Repairers

All Other Construction Trades Workers
Carpenters
Painters & Paperhangers - Construction &
Maintenance
Plumbers, Pipefitters, & Steamfitters

All Other Mining Machine Operators
Blasters & Explosives Workers

All Precision Metal Workers
Machinists

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

PINAL COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Machine Operators & Tenders
Furnace, Kiln, Oven, Drier, or Kettle Opers.
Separating & Filtering Machine Operators

All Other Hand Workers
Welders & Cutters

All Motor Vehicle Operators
Truck Drivers, Heavy or Tractor Trailer

All Rail Vehicle Opers. & Controllers
Rail Yard Engineers, Dinkey Opers. & Hostlers
Railroad Brake, Signal, & Switch Operators

All Other Transportation & Moving Equipment
Operators
Excavating & Loading Machine Operators
Grader, Dozer, & Scraper Operators
Crane & Tower Operators
Pump Operators

All Other Helpers & Laborers
Mechanic & Repairer Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

YAVAPAI COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	18	10	-8	0	-8
Mining, Quarrying, & Drilling Managers	5	4	-1	0	-1
All Other Managers & Administrators	13	6	-7	0	-7
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	53	33	-20	1	-19
All Financial Specialists	6	3	-3	0	-3
All Other Management Support Workers	6	4	-2	0	-2
All Engineers	13	9	-4	0	-4
All Engineering & Related Technicians	2	2	0	0	0
All Physical Scientists	13	9	-4	0	-4
All Other Physical & Life Science Techs.	2	0	-2	0	-2
All Health Professionals, Paraprofessionals, & Technicians	9	5	-4	1	-3
All Other Professional, Paraprofessional, & Technical Workers	2	1	-1	0	-1
SALES & RELATED OCCUPATIONS	2	1	-1	0	-1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	23	15	-8	0	-8
Secretaries	6	5	-1	0	-1
General Office Clerks	6	4	-2	0	-2
All Material Recording/Scheduling/Dist.	5	4	-1	0	-1
All Other Clerical & Administrative Support	6	2	-4	0	-4
SERVICE OCCUPATIONS	9	6	-3	0	-3
All Protective Service Workers	6	4	-2	0	-2
All Other Service Workers	3	2	-1	0	-1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	185	137	-48	5	-43
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	9	6	-3	1	-2
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	14	9	-5	0	-5
All Machinery Maintenance Mechanics	9	6	-3	0	-3
Mobile Heavy Equip. Mechanics, Exc. Engines	11	8	-3	0	-3
All Other Mechanics, Installers, & Repairers	14	9	-5	0	-5
Electricians	7	5	-2	0	-2
Plumbers, Pipefitters, & Steamfitters	5	3	-2	0	-2
All Other Construction Trades Workers	3	2	-1	0	-1
All Extraction Workers, Exc. Helpers	10	8	-2	0	-2
Separating & Filtering Machine Operators	13	9	-4	1	-3
All Other Machine Operators & Tenders	7	6	-1	0	-1
All Hand Workers	6	4	-2	0	-2
All Plant & System Operators	1	0	-1	0	-1
All Motor Vehicle Operators	16	19	3	1	4
Operating Engineers	19	14	-5	1	-4
All Other Transportation & Moving Equipment Operators	26	18	-8	1	-7
All Other Helpers & Laborers	15	11	-4	0	-4
TOTAL ALL OCCUPATIONS	290	202	-88	6	-82

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Accountants & Auditors

All Physical Scientists
Geologists, Geophysicists, & Oceanographers

All Engineers
Metallurgical & Materials Engineers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

MINING

YAVAPAI COUNTY (CONTD.)

SERVICE OCCUPATIONS

All Protective Service Workers
Guards & Watch Guards

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Machinery Maintenance Workers

All Extraction Workers, Exc. Helpers
Mine Cutting & Channeling Machine Operators

All Other Machine Operators & Tenders
Crushing, Grinding, & Mixing Machine Operators

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Hand Workers
Welders & Cutters

All Motor Vehicle Operators
Truck Drivers, Heavy or Tractor Trailer

All Other Transportation & Moving Equip. Operator
Excavating & Loading Machine Operators

All Other Helpers & Laborers
Construction & Extraction Worker Helpers

METHODOLOGY

Sample Selection and Response Rates

Occupational estimates for the mining industry were developed from a survey of employers throughout the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 106 firms with a usable response rate of 88 percent. Firms responding, however, accounted for 99 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total mining employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections--representing the second stage of the forecasting methodology.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy.¹ The "Total Job Openings" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

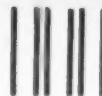
Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

¹ "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

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JUNE 1986

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Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security



**FINANCE, INSURANCE
AND REAL ESTATE**



OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program--a cooperative effort between Arizona and the U.S. Bureau of Labor Statistics.

This *Occupational Profile* is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 700 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The *Occupational Profiles* contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining	Finance, Insurance, and Real Estate
Construction	Services
Manufacturing	Hospitals
Transportation, Communications, and Public Utilities	Educational Services
Trade	Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY DESCRIPTION

Occupational employment estimates for those earning a wage or salary in Arizona's finance, insurance, and real estate (FIRE) industries are provided in this publication for the state and counties.

Finance establishments include banks and trust companies, credit agencies other than banks, holding and investment companies, brokers and dealers in securities and commodity contracts, and security and commodity exchanges.

Insurance includes carriers of all types of insurance, and insurance agents and brokers.

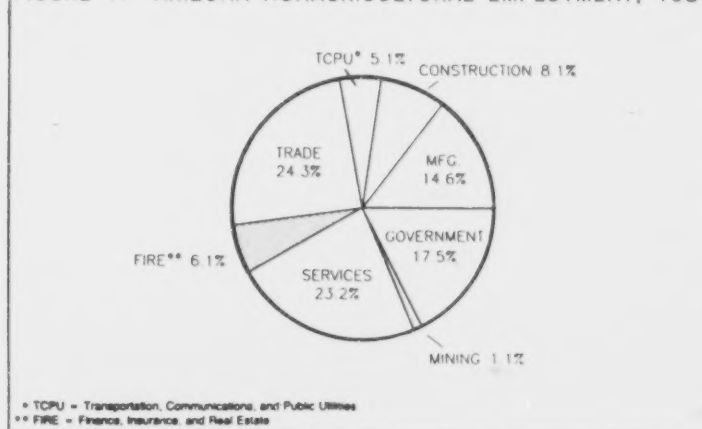
Real estate encompasses real estate operators, and owners and lessors of real property, as well as buyers, sellers, developers, agents, and brokers. Also covered are those firms regularly engaged in any combination of real estate, insurance, loans, or the practice of law.

A detailed description of the types of firms surveyed is found in the *Standard Industrial Classification Manual*¹ under codes 60 through 67.

INDUSTRY CHARACTERISTICS

Nearly 72,000 or 6 percent of Arizona's 1.2 million workers earning a wage or a salary in 1984 were employed by finance, insurance, and real estate firms. Nearly half of these workers are employed by financial institutions--most in national and state banks that are members of the Federal Reserve System. The balance of finance employment is in state chartered banks that are not members of the System, trust and holding companies, and various other banking-related businesses.

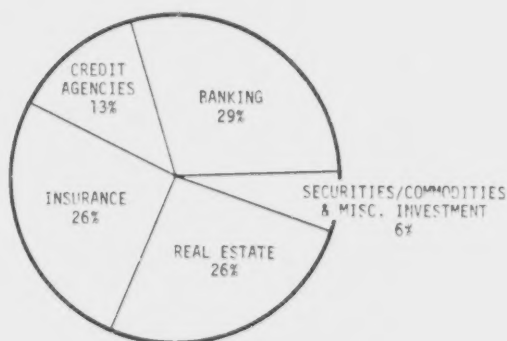
FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1984



¹Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 277-293.

Based on employment in 1984, the real estate and insurance industries trailed finance with employment of 21,000 and 19,000, respectively. The majority of real estate employment (85 percent) is divided between firms selling, buying, renting, managing, and appraising real estate, and those whose primary functions are operating and leasing real property (except developers). Most of the balance are employed by subdividers and developers. The reader is reminded that these data include only workers earning a wage or salary, and exclude the large number who are self-employed or commissioned salespersons.

FIGURE 2: FINANCE, INSURANCE, AND REAL ESTATE
EMPLOYMENT BY ACTIVITY, 1984



In the insurance industry, one worker in three is an independent agent or broker. Another 23 percent are employed by firms that are primarily engaged in underwriting fire, marine, and casualty insurance. Employment in firms that underwrite title insurance and life insurance represent the next largest groups with 17 and 16 percent, respectively. Nearly all the remaining employees are engaged in accident and health insurance activities.

Employment in finance, insurance, and real estate is concentrated in Maricopa County. Although it has 57 percent of Arizona's population, Maricopa County accounts for 78 percent of this industry's employment. The tendency for localization of employment to the Phoenix metropolitan area is greatest in the insurance industry as evidenced by Maricopa County's 89 percent share of employment. The geographic disproportion of employment is even more pronounced when the state's two metropolitan areas are combined. Although three-fourths of Arizona's residents live in Maricopa and Pima counties, more than 92 percent of the industry's employees work in these two counties. This centralization of employment reflects, to a large degree, location of home and regional offices in metropolitan areas.

While population and economic activity are primary determinants of FIRE employment, other factors have major influence. As indicated in figure 3, Pinal County ranks third in population yet represents less than one percent of the state's FIRE employment. The location of Pinal County between Arizona's two largest metropolitan areas suppresses industry employment growth as many administrative functions are more economically performed in Maricopa and Pima counties.

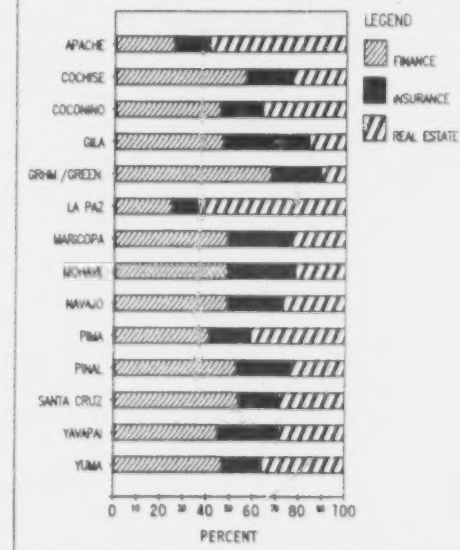
National banks claim the largest share of employment in the nonmetropolitan counties, followed by employment in real estate firms. As evidenced by the following table, the real estate industry claims large shares of FIRE employment in Apache and La Paz counties, and small share in Graham and Greenlee. It should be noted, however, the FIRE employment in these counties is relatively small. The limited insurance industry employment in the state's nonmetropolitan counties for the most part, that of title insurance firms. Also evident is the large real estate share in Pima County. In fact, 43 percent of the employment in Pima County's FIRE industry is employed in the real estate sector as compared to 26 percent in Maricopa and 31 percent in the "balance of state."

Firms in FIRE are relatively small compared to those in other industries, due primarily to the number of operators of apartments and residential mobile home sites. More than 70 percent of these businesses have fewer than five employees. A similar distribution is claimed by firms that employ insurance agents and/or brokers. In the finance sector, firms tend to be larger because of the payrolls at banks. Although most bank employees work for firms that employ more than 1,000, the greatest share of banks have from 20 to 49 employees.

FIGURE 3: COUNTIES' SHARE OF STATE EMPLOYMENT IN FINANCE, INSURANCE, AND REAL ESTATE 1984

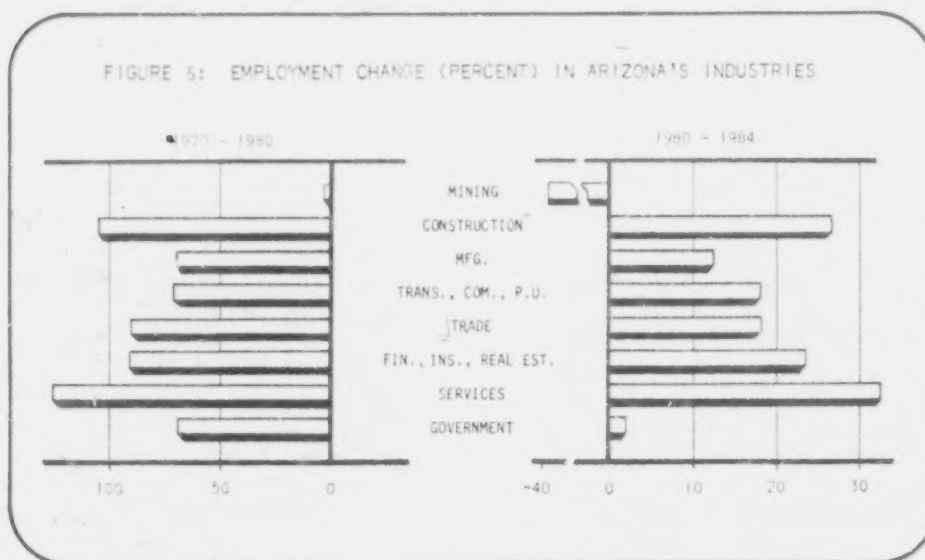
	Employment 1984	Employment Share	Population Share
Apache	275	.48	1.78
Cochise	650	.9	3.0
Cocconino	700	1.0	2.7
Gila	225	.3	1.2
Graham/Greenlee	175	.2	1.2
La Paz	125	.2	.4
Maricopa	55,975	78.1	56.4
Navajo	850	1.2	2.1
Navajo	325	.5	2.3
Pima	10,025	14.0	19.6
Pinal	625	.9	3.2
Santa Cruz	225	.3	.7
Yavapai	725	1.0	2.6
Yuma	850	1.1	2.8
TOTAL	71,675	100.08	100.08

FIGURE 4: PERCENT DISTRIBUTION OF FINANCE, INSURANCE, AND REAL ESTATE EMPLOYMENT IN ARIZONA'S COUNTIES, 1984



INDUSTRY TRENDS

Employment in Arizona's finance, insurance, and real estate industry has been characterized by strong and consistent expansion over the past decade and a half. Since 1980, only services and the volatile construction industry have registered greater employment increases. During the four-year period ending in 1984, FIRE employment increased 13,500 or 23 percent, as compared to a 16 percent increase for all Arizona industries. Over that same period, the FIRE industry increased its share of total state employment to 6.1 percent--up from 5.7 percent.



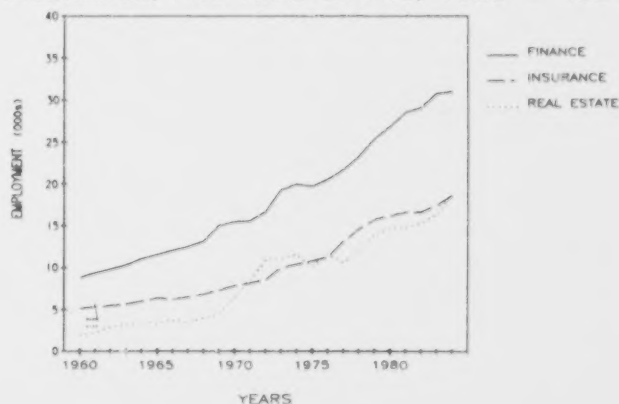
Whereas the finance and insurance industries contribute a degree of stability to the sector's employment growth, real estate employment contributed most to the magnitude of the expansion. Between 1965 and 1985, employment in real estate increased five-fold. Although many years of double-digit increases have been registered, much of this sector's growth transpired between 1969 and 1972 when the number of real estate workers nearly doubled. Expansion is not without periodic setbacks, however, as the real estate industry is particularly vulnerable to economic downturns. During the 1974-75 recession, for example, most of the employment decline in FIRE was the result of losses in the real estate industry.

Dominated by banking, Arizona's finance industry expanded its employment nearly 25 percent between 1980 and 1984--adding approximately 6,600 during the period. The greatest number of new jobs were created by commercial and stock savings banks. The strongest rates of growth, however, were claimed by security and commodity dealers and services. Although employing only 2,400 in 1984, these firms nearly doubled their employment since 1980. These establishments are engaged in the underwriting, purchase, sale, or brokerage of securities and other financial contracts on their own account or for the account of others.

Also registering strong growth in the finance industry were trust companies and firms providing miscellaneous services such as check cashing. So, too, did credit unions, although year-to-year changes were not as consistent as in the finance industry in general.

As compared to the increase of 25 percent for FIRE, employment in Arizona's insurance industry expanded 15 percent between 1980 and 1984. Although the number of agents and brokers earning a wage or salary dipped in 1981, their employment has increased consistently to total 6,300 in 1984. Registering more moderate expansion is employment in firms that underwrite insurance.

FIGURE 6: EMPLOYMENT IN FINANCE, INSURANCE, AND REAL ESTATE, 1960 - 1984



Bolstered by both strong economic growth and the demands of a population that is increasing about 3.5 percent annually, employment of those earning a wage or salary in FIRE is expected to reach 70,000 by 1988. Although this is a 20 percent increase, it represents a slight moderation from recent years. There will be no moderation, however, in the dynamic changes that the industry is undergoing. Technological developments are affecting the structure of commercial banking while deregulation and the marketplace are changing the nature of the financial services industry. For example, use of electronic funds transfer systems (EFTS) has been growing rapidly in both the wholesale and retail banking sectors. Automated teller machines numbered about 45,000 in the U.S. in 1984 and have, in recent years, suppressed the number of new bank branches. Also gaining popularity nationally and in Arizona are debit cards that, in conjunction with point-of-sale (POS) terminals, transfer funds from a buyer's account to a seller's account. Of less imminent impact is the likelihood of home banking that may, to be profitable, be packaged with such nonbank activities as brokerage, retail, entertainment, and news services.

In the wholesale banking sector, technological advances have led the way to, among other things, automated clearing houses that provide a range of services from the direct deposit of payrolls to preauthorized debits

for utility bills or insurance. Financial institutions also benefited from technology that resulted in services such as "Bank Wire" which provides the means to transfer funds, reimbursements, and messages from one member bank to another.

Deregulation has allowed nonbanking establishments such as retail stores to provide certain banking functions while at the same time allowing expanded services at banks. Legislation passed in 1982, for example, allowed savings and loan institutions to offer investment advice, sell stocks, bonds, mutual funds, and offer checking account services. Legislation has also permitted banks in 1985 to offer a wider range of products and at higher interest rates, in part, to compete with unregulated firms such as department stores that are now offering services that were once provided by banks only.

Abetting changes in Arizona's finance industry is legislation, effective after October 1, 1986, that allows banks from any other state to acquire those in Arizona. One can only speculate on the employment impact of takeovers, such as the planned acquisition of Great-Western Bank by Citicorp which was announced in late 1985. It is the opinion of many in the industry that such acquisitions will boost employment levels as banks diversify their services and products. Analysts, nationwide, will be watching Arizona--one of only three states with such far-reaching revisions of interstate-banking regulations.

Other legislation being considered by Congress addresses the nonbank bank issue. Nonbank banks abstain either from accepting deposits or making commercial loans--activities that must be performed for a company to be defined as a bank for Bank Holding Company Act regulation purposes. Such firms can be owned by companies primarily involved in manufacturing, retailing, or other financial services. Bills designed to regulate nonbank banks were not passed in 1984 but were followed by new regulation efforts.

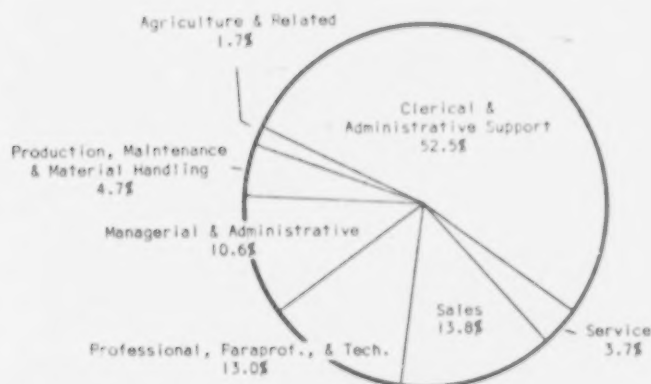
In Arizona's real estate industry, employment of those earning a wage or salary is projected to increase 20 percent between 1984 and 1988. A rapidly increasing population that is also aging will generate much of the employment growth through the demand for home purchases and rental units. Young adults with career and family responsibilities are a mobile population that traditionally makes most home purchases. Employment expansion in this industry is not without periodic interruption, however, as sales react to declining economic activities and tight credit.

Somewhat less vulnerable to the vagaries of the economy is employment in the insurance industry. Sales volume of life and health insurance will increase over the next decade as many more workers enter the 25-54 age group. Also boosting sales volume will be policies designed to provide retirement income, educational funds for children, and life and disability protection for working women. Employment of agents and brokers may not keep pace with the rising level of insurance sales, however, because more policies will be sold to groups and by mail. The trend to multiline agents, and the rise of computers to take over routine clerical tasks, will further suppress the rate of employment growth.

OCCUPATIONAL ANALYSIS

More than any other industry in Arizona, finance, insurance, and real estate is numerically dominated by clerical workers who account for one of every two employees. Banks and credit agencies, especially, employ a large number of clericals with 5,627 tellers accounting for the largest portion of their employment. Representing 74 percent of the workers in banks, credit agencies, and other financial services, clerical workers also prevail in insurance (54 percent) and real estate (26 percent).

FIGURE 7: OCCUPATIONS IN FINANCE, INSURANCE,
AND REAL ESTATE - MAY 1984



Following tellers, which were reported by the finance industry only, are those clerical occupations common to all FIRE industries. Employment of secretaries (4,811), general office clerks (4,038), and bookkeeping, accounting, and auditing clerks (2,401), all contributed to the prominence of the clerical category.

Sales occupations represent the second largest category, constituting about 14 percent of the industry's employment. Most numerous in this class are insurance agents and placers (2,842), and sales agents for securities, commodities, and financial services (1,912) and for real estate (1,901).

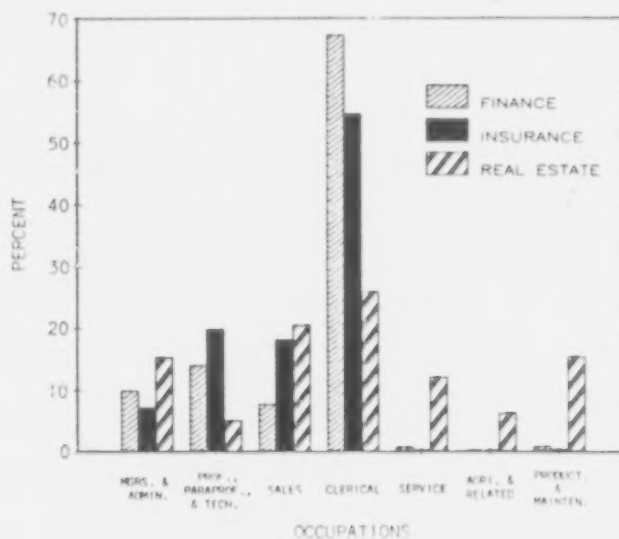
With 13 percent of the employment in FIRE, professional, paraprofessional, and technical workers rank third based on employment. Most notable in this category are loan officers and counselors (1,340), underwriters (1,032), and accountants and auditors (897). Although the finance industry employs the greatest number of professional, paraprofessional, and technical workers, it is in the insurance industry that these workers represent the largest share of employment. Boosted by employment of underwriters, one in five insurance industry employees is a professional, paraprofessional, or technical worker. In finance the ratio is one in seven; in real estate one in twenty.

A comparison of staffing patterns for metropolitan counties and their rural counterparts reveals a greater percentage of professional and technical workers in Maricopa County and sales and related workers in Pima County. A relatively large insurance industry and a preponderance of EDP systems analysts and other computer related occupations in Maricopa County contributes to the large professional workers category. The prominence of Pima County's sales workers reflects that area's greater share of workers earning a wage or salary in the real estate industry.

FIGURE 9: COMPARISON OF COUNTY STAFFING PATTERNS IN FINANCE, INSURANCE, AND REAL ESTATE, MAY 1984

Occupations	Maricopa County	Pima County	Non-metro Counties
Managerial	10.5	11.7	9.2
Prof./Paraprof. & Tech.	13.9	9.1	11.1
Sales & Related	12.9	19.2	13.1
Clerical/Admin. Support	33.9	47.2	36.2
Service	3.5	4.0	3.3
Ag., Forestry, & Related	1.0	2.6	1.5
Production & Maintenance	4.3	5.4	6.6
	100.0%	100.0%	100.0%

FIGURE 9: MAJOR OCCUPATIONAL CATEGORIES IN FINANCE, INSURANCE, AND REAL ESTATE - 1984



In Arizona, FIRE will realize employment expansion in each of the major occupational categories as the industry adds a projected 13,000 new jobs between 1984 and 1988. This increase represents a 20 percent expansion which, coincidentally, is the projected average increase for all industries in Arizona over the four-year period. In addition to the openings created by growth of the industry, another 11,000 openings will result from workers leaving their jobs and the labor force. Finally, a

larger and indeterminate number of openings will result from workers changing jobs. Job turnover, as these openings are defined, is generally the greatest source of job openings, and is particularly high in clerical occupations--occupations which predominate in FIRE. In fact, more than one-half of the 13,000 new jobs created in the industry will be in clerical and administration support occupations.

Although the widespread use of automated tellers has in recent years suppressed the number of new bank branches, those seeking positions as bank tellers will continue to benefit from the greatest number of openings in FIRE. The occupation is further benefited by less sensitivity to economic downturns--thereby providing a greater degree of employment stability. Openings for tellers are projected to average nearly 600 annually during the projection period. In addition, many more openings will transpire as tellers leave their positions to take another. As previously mentioned, the future will likely bring banking by phone, in retail stores, and other areas outside the bank--thus changing the working environment of some tellers and perhaps affecting the skills they possess.

As the second largest occupation in the industry, secretaries are in very strong demand due to employment expansion and the need to replace those who leave the occupation. Contributing to the shortage of qualified secretaries is the changing role of women in the workplace, as reflected by the number of women in positions traditionally held by men. Because of the value that employers place on skilled secretaries, temporary and part-time work schedules are expected to be common inducements to those jobseekers requiring more flexible schedules.

Although automation of some office procedures will likely affect the responsibilities of secretaries, the degree of impact is not without considerable debate. It is certain, however, that technology will not likely replace the personal qualities that secretaries bring to their jobs. Prospects are best for secretaries with strong typing, shorthand, and word processing skills combined with organizational ability and initiative. Especially valuable in the marketplace are those with strong communication skills--both written and verbal.

Performing a variety of clerical duties ranging from bookkeeping and typing to office machine operations are the 4,000 general office clerks in the FIRE industry. As in most other clerical occupations, there is considerable movement into and out of the labor force and other positions. Because the employment in this occupation is large, replacement needs produce a great many openings. For similar reasons, strong demand for bookkeeping, accounting, and auditing clerks can also be expected. The projected need for these workers will not, however, mirror the rising volume of business transactions. Increasing use of more sophisticated computers and software will continue to suppress the number of workers who process data by hand.

Trailing a distant second to the projected 14,000 openings for clerical workers are the 3,300 expected in sales. The bulk of these openings will be for sellers of insurance; real estate; and securities, commodities, and financial services. Demographic changes, such as the expanding 25-54 age group, will create increasing demand for homes, insurance, and

financial services. Despite the employment growth to satisfy these demands, most job openings will result from workers leaving the occupation and/or the labor force. In this highly competitive environment, not all beginners will be able to establish a clientele or close a sufficient number of sales; however, well trained and ambitious people who enjoy selling will have the best chances for success.

In the wake of deregulation, those with expertise in sales will find a relatively small but increasing number of opportunities in banking. Don Lindner, senior vice president of Human Resources at The Arizona Bank, observes that deregulation has resulted in heightened competition in the industry. Among other things, deregulation allows banks to provide expanded services and products, while at the same time permits other organizations such as savings and loans, and department stores to assume certain banking functions. "Growing competition" says Lindner, "will require increased emphasis on marketing and sales--both in wholesale and retail banking."

In the professional ranks, underwriters and loan officers and counselors will provide the greatest number of opportunities to job seekers. Again, demographic changes will spur expansion in these fields. As the professional occupation with the greatest employment, "loan officers and counselors" numbered 1,340 in May 1984. These professionals evaluate, authorize, and/or recommend approval of loans and advise borrowers on financial status and methods of payments. Those aspiring to employment as a loan officer or counselor can expect about 100 opportunities annually as a result of industry expansion and the need to replace workers who leave the labor force.

FIGURE 10: PROFESSIONAL AND TECHNICAL
OCCUPATIONS IN FIRE - MAY 1984

<u>Occupation</u>	<u>Employment</u>
Loan Officers and Counselors	1,340
Underwriters	1,032
Accountants and Auditors	897
Title Examiners and Abstractors	719
Systems Analysts, EDP	610
Computer Programmers	383
Credit Analysts	380

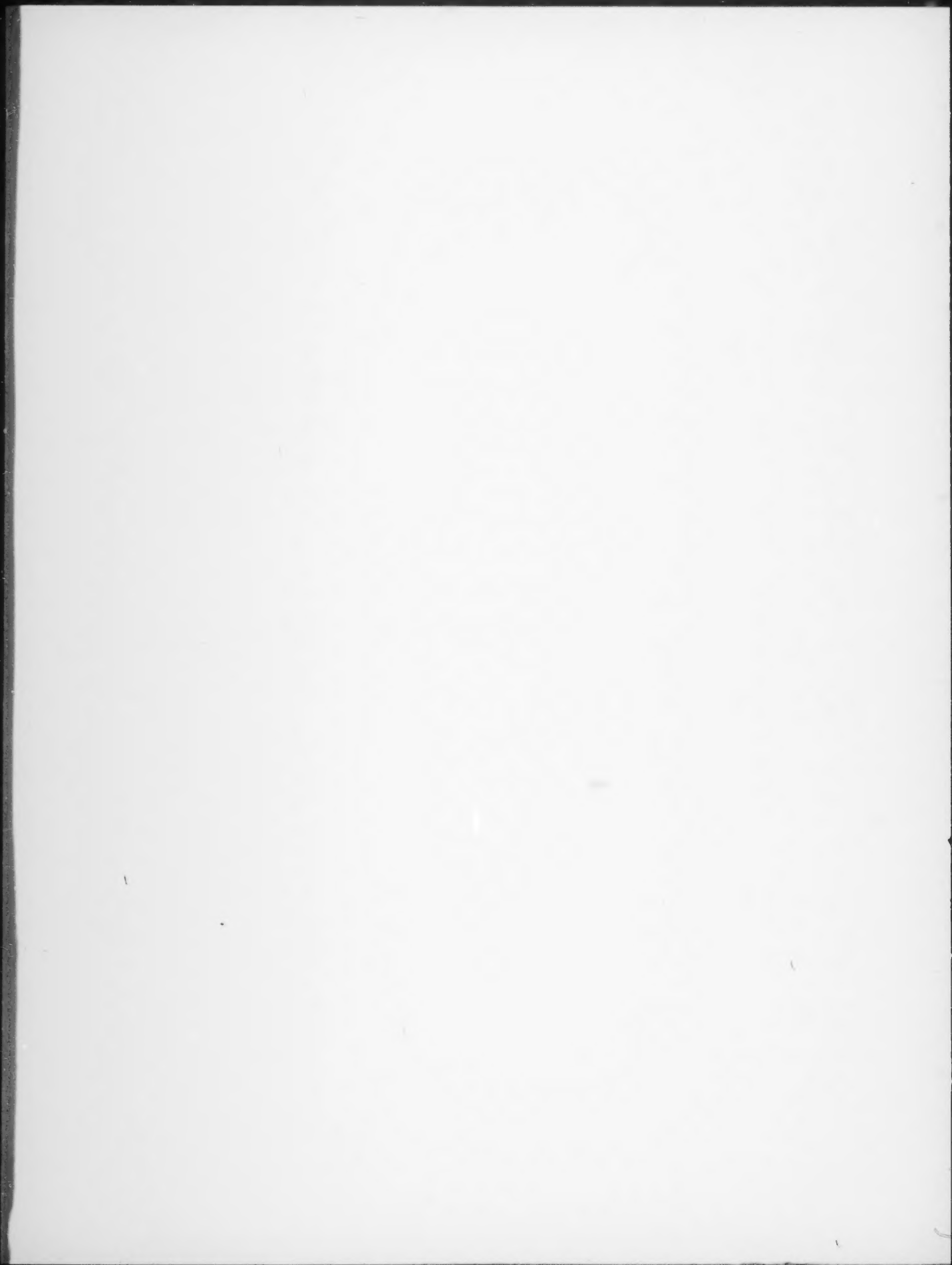
Appraising and selecting the risks that their companies will insure are the 1,032 underwriters in Arizona's FIRE industry. In addition to analyzing applications, medical reports, and actuarial studies to determine risk, many underwriters outline the terms of contracts to clients, and maintain frequent correspondence with policyholders, agents, and managers regarding policy changes, cancellations, or requests for information.

Managerial occupations and maintenance and production workers account for most of the balance of FIRE employment. In the managerial category, financial, property and real estate, and general managers are most numerous and it will be in these occupations that the greatest number of job openings occur.

FIGURE 11: OCCUPATIONS WITH THE GREATEST EMPLOYMENT
IN FINANCE, INSURANCE, AND REAL ESTATE

	Employment 1984	Job Openings* 1984-1986
Tellers	5,627	2,354
Secretaries	4,811	1,996
General Office Clerks	4,038	1,640
Sales Agents & Placers, Insurance	2,842	865
Bookkeeping, Accounting, & Auditing Clerks	2,401	891
Loan & Credit Clerks	2,189	871
Financial Managers	2,063	597
First Line Supers.-Clerical & Admin. Support	2,014	631
Maintenance Repairers, General Utility	1,975	545
Sales Agents., Securities/Commod./Fin. Services	1,912	638
Sales Agents, Real Estate	1,901	771
Property & Real Estate Managers & Admin.	1,562	516
General Managers & Top Executives	1,547	447
Receptionists & Information Clerks	1,394	539
Data Entry Keyers, Exc. Composing	1,386	365
Loan Officers & Counselors	1,340	389
First Line Supervisors & Managers-Sales	1,253	394
Insurance Policy Processing Clerks	1,227	502
Gardeners & Groundskeepers, Exc. Farm	1,201	465
Insurance Adjusters, Examiners, & Investigators	1,169	350
Underwriters	1,032	376
New Accounts Clerks	1,017	461
Accountants & Auditors	897	280
Janitors & Cleaners, Exc. Maids & Housekeeping	803	279
Adjustment Clerks	786	312
Title Examiners & Abstractors	719	282
Bill & Account Collectors	718	226
Brokers, Real Estate	690	271
Systems Analysts, Electronic Data Processing	610	138
Insurance Claims Clerks	587	235
File Clerks	583	258
Typists	548	225
Food & Beverage Preparation & Service	525	189
Guards & Watch Guards	518	124
Statement Clerks	465	186

* Does not include turnover.



OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. Graham and Greenlee counties have been combined due to their close proximity, similar economies, and size. When using the data, please note the following:

- 1) Employment growth in each of the nonmetropolitan counties reflects the rate calculated for the "balance of state" (Arizona less Maricopa and Pima counties). Projected employment for Yavapai County, for example, reflects levels that would be attained if the industry were to expand at the rate that is predicted for all FIRE employment in the "balance of state."
- 2) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid-family workers.
- 3) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.
- 4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "All Other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.
- 5) The projection technique does not possess the degree of accuracy that may be implied by unrounded numbers.
- 6) Data for occupations with employment of less than five are included in the appropriate "All Other" categories. These occupations are not listed, however, in the summary of "All Other" categories which follows each table.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

ARIZONA

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	7,403	10.6	8,754	2,197
Financial Managers	2,063	2.9	2,439	597
Personnel, Training, & Labor Relations Mgrs.	185	.3	215	42
Purchasing Managers	26	.0	27	1
Marketing, Advertising, & Public Rel. Mgrs.	217	.4	249	54
Administrative Services Managers	338	.5	394	86
Property & Real Estate Managers & Admin.	1,562	2.2	1,868	516
Food Service & Lodging Managers	161	.2	187	44
General Managers & Top Executives	1,547	2.2	1,827	447
All Other Managers & Administrators	1,304	1.9	1,548	410
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	9,115	13.0	10,720	2,627
Management Support Occupations	5,524	7.9	6,516	1,674
Underwriters	1,032	1.5	1,231	376
Credit Analysts	380	.5	437	128
Loan Officers & Counselors	1,340	1.9	1,600	389
Accountants & Auditors	897	1.3	1,058	280
Budget Analysts	33	.0	35	3
All Other Financial Specialists	370	.5	435	97
Purchasing Agents, Exc. Wholesale, Retail, & Farm	74	.1	83	14
Special Agents, Insurance	290	.4	336	74
Personnel, Training, & Labor Rel. Specialists	253	.4	298	69
Cost Estimators	15	.0	17	4
Management Analysts	54	.1	63	19
Construction & Building Inspectors	29	.0	31	5
Assessors	6	.0	6	0
Claims Examiners, Property & Casualty Insurance	322	.5	382	90
All Other Management Support Workers	429	.6	504	126
Engineers & Related Occupations	257	.4	297	51
Engineers	96	.1	113	21
Safety Engineers, Exc. Mining	22	.0	26	4
All Other Engineers	34	.0	39	7
Architects, Exc. Landscape & Marine	9	.0	10	1
Drafters	28	.0	31	3
All Other Engineering & Related Technicians	68	.1	78	15
Computer, Math, Operations, Research, & Related	1,365	1.9	1,605	294
Systems Analysts, Electronic Data Processing	610	.9	727	138
Computer Programmers	383	.5	450	80
Computer Programmer Aides	63	.1	72	11
Operations & Systems Analysts, Exc. Computer	87	.1	102	16
Actuaries	41	.1	47	11
Financial Analysts, Statistical	138	.2	159	31
All Other Mathematical Scientists	5	.0	5	0
Economists, Incl. Market Research Analysts	38	.0	43	7
Law & Related Occupations	1,119	1.6	1,310	392
Lawyers	116	.2	134	25
Law Clerks	26	.1	29	4
Paralegal Personnel	13	.0	13	0
Title Searchers	214	.3	248	73
Title Examiners & Abstractors	719	1.0	851	282
All Other Legal Assistants/Techs., Exc. Clerical	31	.0	35	8
Health Practitioners, Techs., & Related Occupations	164	.2	189	52
Registered Nurses	81	.1	94	26
Licensed Practical Nurses	32	.0	37	11
All Other Health Professionals, Paraprofessionals, & Technicians	51	.1	58	15
All Other Professional, Paraprofessional, & Technical Workers	686	1.0	803	164

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Public Rel. Specialists & Publicity Writers	115	.2	130	25
All Other Professional, Paraprofessional, & Technical Workers	571	.8	673	139
SALES & RELATED OCCUPATIONS	9,665	13.8	11,515	3,283
First Line Supervisors & Managers - Sales	1,253	1.8	1,485	394
Sales Agents & Placers, Insurance	2,842	4.1	3,387	865
Brokers, Real Estate	690	1.0	820	271
Sales Agents, Real Estate	1,901	2.7	2,272	771
Appraisers, Real Estate	284	.4	339	109
Sales Agts., Securities/Commodities/Fin. Serv.	1,912	2.7	2,294	638
Sales Agents, Selected Business Services	128	.2	150	40
All Other Sales Representatives & Salespersons, Service	283	.4	334	83
Cashiers	139	.2	162	47
All Other Sales & Related Workers	233	.3	272	65
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	36,822	52.5	43,700	13,936
First Line Supervisors & Manager/Supervisors	2,014	2.9	2,396	631
First Line Supers.-Clerical & Admin. Support	2,014	2.9	2,396	631
Industry-Specific Clerical & Admin. Support	15,324	21.9	18,228	6,045
Tellers	5,627	8.0	6,718	2,354
New Accounts Clerks	1,017	1.5	1,203	461
Transit Clerks	177	.3	211	66
Loan Interviewers	205	.3	241	57
Credit Authorizers	203	.3	241	80
Credit Checkers	148	.2	175	55
Loan & Credit Clerks	2,189	3.1	2,600	871
Adjustment Clerks	786	1.1	935	312
Statement Clerks	465	.7	554	186
Brokerage Clerks	174	.2	206	67
Insurance Adjusters, Examiners, & Investigators	1,169	1.7	1,396	350
Insurance Appraisers, Auto Damage	78	.1	90	23
Insurance Examining Clerks	133	.2	154	45
Insurance Claims Clerks	587	.8	699	235
Insurance Policy Processing Clerks	1,227	1.8	1,464	502
Bill & Account Collectors	718	1.0	848	226
Real Estate Clerks	421	.6	493	155
Other Secretarial Related & General Office Workers	15,103	21.7	17,909	5,953
Legal Secretaries	24	.0	26	4
Secretaries	4,811	6.9	5,727	1,996
Stenographers	69	.1	78	20
Receptionists & Information Clerks	1,394	2.0	1,648	539
Typists	548	.8	643	225
Typists, Word Processing Equipment	458	.7	537	122
Personnel Clerks, Exc. Payroll & Timekeeping	107	.2	121	34
Correspondence Clerks	215	.3	256	85
File Clerks	583	.8	689	258
Statistical Clerks	67	.1	75	18
Bookkeeping, Accounting, & Auditing Clerks	2,401	3.4	2,848	891
Payroll & Timekeeping Clerks	124	.2	136	22
Billing, Cost & Rate Clerks	264	.4	312	99
General Office Clerks	4,038	5.8	4,813	1,640
Electronic Data Processing & Other Office Machine Opers.	2,573	3.7	3,046	776
Billing, Posting, & Calculating Machine Opers.	158	.2	187	55
Duplicating Machine Operators	31	.1	35	9
Mail Machine Operators, Preparation & Handling	103	.1	120	44
Computer Operators, Exc. Peripheral Equipment	461	.7	543	123
Peripheral EDP Equipment Operators	241	.3	283	94

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Data Entry Keyers, Exc. Composing	1,386	2.0	1,650	365
All Other Office Machine Operators	193	.3	228	86
Communications, Mail, & Message Distributing Occupations	1,044	1.5	1,225	363
Switchboard Operators	449	.6	526	182
Mail Clerks, Exc. Mail Machine Operators & Postal Service	349	.5	412	115
Messengers	246	.4	287	66
Material Recording, Scheduling, & Distribution	320	.5	375	83
Stock Clerks - Stockroom, Warehouse, or Yard	124	.2	145	30
All Other Material Recording/Scheduling/Dist.	196	.3	230	53
All Other Clerical & Administrative Support Workers	444	.6	521	85
SERVICE OCCUPATIONS	2,586	3.7	3,063	856
First Line Supervisors & Managers - Service	144	.2	168	50
Protective Service Occupations	539	.7	642	132
Guards & Watch Guards	518	.7	616	124
All Other Protective Service Workers	21	.0	26	8
Food & Beverage Preparation & Service Occupations	525	.7	625	189
Cleaning & Building Service Occupations, Exc. Private Householders	1,169	1.7	1,382	409
Janitors & Cleaners, Exc. Maids & Housekeeping	803	1.1	949	279
All Other Cleaning/Building Service, Exc. Private House	366	1.6	433	130
All Other Service Occupations	209	.3	246	76
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1,201	1.7	1,435	465
Gardeners & Groundskeepers, Exc. Farm	1,201	1.7	1,435	465
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	3,249	4.7	3,818	849
First Line Supervisors & Managers - Prod. & Related	251	.4	291	73
First Line Managers/Supervisors - Construction Trades & Extraction Workers	65	.1	75	13
First Line Mgrs./Supers. - Transport. Operatives	48	.1	56	17
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	138	.2	160	43
Inspectors & Related Occupations	23	.0	26	5
Mechanics, Installers, & Repairers	2,065	2.9	2,450	561
Maintenance Repairers, General Utility	1,975	2.8	2,347	545
All Other Mechanics, Installers, & Repairers	90	.1	103	16
Construction Trades & Extractive Occupations, Ex. Material Moving	400	.7	464	101
Carpenters	116	.2	136	32
Electricians	11	.0	11	0
Painters & Paperhangers - Construction & Maintenance	136	.2	161	40
Plumbers, Pipefitters, & Steamfitters	31	.0	36	8
All Extraction Workers, Exc. Helpers	106	.2	120	21
Precision Production Occupations	64	.1	74	14
Job Printers	7	.0	8	1
All Other Precision Printing Workers	2	.0	2	0
All Other Precision Workers	55	.1	64	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Machine Setters, Operatives, Tenders	65	.1	75	14
Hand Working Occupation Inc. Assemblers & Fabricators	45	.1	53	11
Plant & System Occupations	15	.0	16	1
Motor Vehicle Operators	104	.2	117	15
Truck Drivers, Light - Incl. Delivery & Route	55	.1	63	9
All Other Motor Vehicle Operators	4	.0	4	0
All Other Transportation & Moving Equip. Operators	45	.1	50	6
Helpers, Laborers, & Material Movers, Hand	217	.3	252	54
Freight, Stock, & Material Movers, Hand	23	.0	26	4
All Other Helpers & Laborers	194	.3	226	50
TOTAL ALL OCCUPATIONS	70,041	100.0	83,005	24,213

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

APACHE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	15	15	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	38	40	2	3	5
All Financial Specialists	15	16	1	2	3
All Other Management Support Workers	12	12	0	1	1
All Legal Assistants/Techs., Exc. Clerical	2	2	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	9	10	1	0	1
SALES & RELATED OCCUPATIONS	9	9	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	108	111	3	12	15
Tellers	29	31	2	5	7
New Accounts Clerks	5	5	0	1	1
Secretaries	31	32	1	4	5
All Communication Equipment Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	3	3	0	0	0
All Other Clerical & Administrative Support	39	39	0	2	2
SERVICE OCCUPATIONS	6	6	0	1	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	32	34	2	1	3
All First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Maintenance Repairers, General Utility	27	29	2	1	3
All Transportation & Moving Equip. Moving Operators	2	2	0	0	0
Freight, Stock, & Material Movers, Hand Operators	2	2	0	0	0
TOTAL ALL OCCUPATIONS	208	215	7	17	24

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts
Accountants & Auditors

All Other Management Support Workers
Construction & Building Inspectors

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Loan & Credit Clerks
Insurance Policy Processing Clerks
Typists

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
COCHISE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	54	56	2	2	4
Financial Managers	23	24	1	1	2
General Managers & Top Executives	13	13	0	0	0
All Other Managers & Administrators	18	19	1	1	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	65	68	3	6	9
All Financial Specialists	21	22	1	2	3
All Other Management Support Workers	12	13	1	1	2
Title Examiners & Abstractors	10	11	1	2	3
All Other Legal Assistants/Techs., Exc. Clerical	5	5	0	1	1
All Health Professionals, Paraprofessionals & Technicians	2	2	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	15	15	0	0	0
SALES & RELATED OCCUPATIONS	58	62	4	6	10
All Sales Representatives & Salespersons, Service	45	49	4	5	9
All Other Sales & Related Workers	13	13	0	1	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	336	363	27	55	82
Tellers	120	135	15	26	41
New Accounts Clerks	23	25	2	6	8
Loan & Credit Clerks	21	22	1	4	5
Insurance Policy Processing Clerks	8	8	0	1	1
Secretaries	35	37	2	5	7
Bookkeeping, Accounting, & Auditing Clerks	17	18	1	2	3
General Office Clerks	52	56	4	9	13
All Communication Equipment Operators	5	5	0	0	0
All Other Clerical & Administrative Support	55	57	2	2	4
SERVICE OCCUPATIONS	25	26	1	2	3
All Food Service Workers	3	3	0	0	0
Janitors & Cleaners, Exc. Maids & Housekeeping	22	23	1	2	3
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	69	75	6	5	11
Maintenance Repairers, General Utility	15	16	1	1	2
All Extraction Workers, Exc. Helpers	41	45	4	3	7
All Helpers & Laborers	13	14	1	1	2
TOTAL ALL OCCUPATIONS	609	652	43	76	119

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts
Loan Officers & Counselors

All Other Management Support Workers
Special Agents, Insurance

All Other Legal Assistants/Techs., Exc. Clerical
Title Searchers

SALES & RELATED OCCUPATIONS

All Sales Representatives &
Salespersons, Service
Sales Agents & Placers, Insurance
Brokers, Real Estate
Appraisers, Real Estate

All Other Sales & Related Workers
First Line Supervisors & Managers - Sales

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
COCHISE COUNTY (CONTD.)

CLERICAL & ADMINSTRATIVE SUPPORT OCCUPATIONS

All Communication Equipment Operators
Switchboard Operators

All Other Clerical & Administrative Support
First Line Supers.-Clerical & Admin. Support
Bill & Account Collectors
Real Estate Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

COCONINO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	83	87	4	4	8
Financial Managers	41	44	3	3	6
Property & Real Estate Managers & Admin.	11	11	0	0	0
General Managers & Top Executives	12	12	0	0	0
All Other Managers & Administrators	19	20	1	1	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	48	50	2	3	5
Loan Officers & Counselors	7	7	0	0	0
All Other Financial Specialists	18	19	1	2	3
All Other Management Support Workers	6	6	0	0	0
All Legal Assistants/Techs., Exc. Clerical	17	18	1	1	2
SALES & RELATED OCCUPATIONS	71	76	5	8	13
First Line Supervisors & Managers - Sales	7	7	0	0	0
Sales Agents & Placers, Insurance	31	34	3	3	6
Sales Agents, Real Estate	25	27	2	4	6
All Other Sales Representatives & Salespersons, Service	7	7	0	1	1
All Other Sales & Related Workers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	394	424	30	61	91
First Line Supers.-Clerical & Admin. Support	21	23	2	2	4
Tellers	139	156	17	29	46
New Accounts Clerks	20	22	2	5	7
Loan & Credit Clerks	14	15	1	2	3
Real Estate Clerks	9	9	0	1	1
Secretaries	62	66	4	10	14
Receptionists & Information Clerks	15	15	0	1	1
Typists	11	11	0	1	1
Bookkeeping, Accounting, & Auditing Clerks	19	19	0	0	0
General Office Clerks	39	42	3	8	11
All Office Machine Operators	3	3	0	0	0
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	41	42	1	2	3
SERVICE OCCUPATIONS	67	70	3	6	9
All Service Supervisors & Managers	1	1	0	0	0
All Protective Service Workers	11	12	1	0	1
All Food Service Workers	5	5	0	0	0
Janitors & Cleaners, Exc. Maids & Housekeeping	24	25	1	3	4
All Other Cleaning/Building Service, Exc. Private House	21	22	1	2	3
All Other Service Workers	5	5	0	1	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	28	30	2	4	6
Gardeners & Groundskeepers, Exc. Farm	28	30	2	4	6
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	34	36	2	2	4
Maintenance Repairers, General Utility	30	32	2	2	4
All Construction Trades Workers	4	4	0	0	0
TOTAL ALL OCCUPATIONS	725	773	48	88	136

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Credit Analysts

All Legal Assistants/Techs., Exc. Clerical
Title Searchers
Title Examiners & Abstractors

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Brokers, Real Estate

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
COCONINO COUNTY (CONTD.)

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Insurance Adjusters, Examiners, & Investigators
Insurance Policy Processing Clerks

SERVICE OCCUPATIONS

All Protective Service Workers
Guards & Watch Guards

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

GILA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	15	16	1	1	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	24	25	1	3	4
All Financial Specialists	8	8	0	1	1
All Other Management Support Workers	2	2	0	0	0
All Legal Assistants/Techs., Exc. Clerical	12	13	1	2	3
All Other Professional, Paraprofessional, & Technical Workers	2	2	0	0	0
SALES & RELATED OCCUPATIONS	14	15	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	124	132	8	19	27
Tellers	44	49	5	9	14
New Accounts Clerks	10	11	1	2	3
Loan & Credit Clerks	11	11	0	2	2
Secretaries	14	14	0	2	2
Bookkeeping, Accounting, & Auditing Clerks	7	7	0	0	0
General Office Clerks	11	12	1	2	3
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	26	27	1	2	3
SERVICE OCCUPATIONS	3	3	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	6	6	0	0	0
All Mechanics, Installers, & Repairers	6	6	0	0	0
TOTAL ALL OCCUPATIONS	186	197	11	24	35

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Managers & Administrators
Financial Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts

All Legal Assistants/Techs., Exc. Clerical
Title Examiners & Abstractors

SALES & RELATED OCCUPATIONS

Sales Agents & Placers, Insurance

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
First Line Supers.-Clerical & Admin. Support
Insurance Policy Processing Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
GRAHAM & GREENLEE COUNTIES

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	11	11	0	0	0
Financial Managers	10	10	0	0	0
All Other Managers & Administrators	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	17	17	0	1	1
All Financial Specialists	10	10	0	1	1
All Legal Assistants/Techs., Exc. Clerical	7	7	0	0	0
SALES & RELATED OCCUPATIONS	7	7	0	0	0
All Sales Representatives & Salespersons, Service	7	7	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	75	79	4	9	13
First Line Supers.-Clerical & Admin. Support	7	7	0	0	0
Tellers	34	37	3	7	10
New Accounts Clerks	7	7	0	1	1
Secretaries	7	7	0	0	0
General Office Clerks	9	10	1	1	2
All Office Machine Operators	1	1	0	0	0
All Other Clerical & Administrative Support	10	10	0	0	0
SERVICE OCCUPATIONS	4	4	0	0	0
TOTAL ALL OCCUPATIONS	114	118	4	10	14

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Financial Specialists
Credit Analysts

All Legal Assistants/Techs., Exc. Clerical
Title Examiners & Abstractors

SALES & RELATED OCCUPATIONS

All Sales Representatives & Salespersons, Service
Sales Agents & Placers, Insurance

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Loan & Credit Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
LA PAZ COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	5	5	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	11	11	0	0	0
All Management Support Workers	4	4	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	7	7	0	0	0
SALES & RELATED OCCUPATIONS	4	4	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	30	31	1	3	4
SERVICE OCCUPATIONS	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	19	20	1	1	2
TOTAL ALL OCCUPATIONS	70	72	2	4	6

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

Tellers
General Office Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

Maintenance Repairers, General Utility

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

MARICOPA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS					
Financial Managers	5,787	6,877	1,090	709	1,799
Personnel, Training, & Labor Relations Mgrs.	1,487	1,771	284	170	454
Purchasing Managers	168	196	28	12	40
Marketing, Advertising, & Public Rel. Mgrs.	23	24	1	0	1
Administrative Services Managers	186	216	30	21	51
Property & Real Estate Managers & Admin.	253	297	44	26	70
Food Service & Lodging Managers	1,388	1,658	270	191	461
General Managers & Top Executives	111	130	19	14	33
All Other Managers & Administrators	1,179	1,403	224	140	364
	992	1,182	190	135	325
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL					
Underwriters	7,647	9,044	1,397	880	2,277
Credit Analysts	980	1,171	191	170	361
Loan Officers & Counselors	246	291	45	51	96
Accountants & Auditors	1,058	1,266	208	107	315
Budget Analysts	771	913	142	109	251
All Other Financial Specialists	31	33	2	1	3
Purchasing Agents, Exc. Wholesale, Retail, & Farm	315	373	58	30	88
Special Agents, Insurance	66	74	8	5	13
Personnel, Training, & Labor Rel. Specialists	214	254	40	23	63
Management Analysts	242	285	43	24	67
Assessors	53	62	9	10	19
Claims Examiners, Property & Casualty Insurance	6	6	0	0	0
All Other Management Support Workers	253	301	48	25	73
Safety Engineers, Exc. Mining	342	400	58	42	100
All Other Engineers	18	21	3	0	3
Drafters	112	131	19	6	25
All Other Engineering & Related Technicians	17	19	2	0	2
Systems Analysts, Electronic Data Processing	72	82	10	5	15
Computer Programmers	596	711	115	21	136
Computer Programmer Aides	376	443	67	13	80
Operations & Systems Analysts, Exc. Computer	55	64	9	2	11
Actuaries	86	101	15	1	16
Financial Analysts, Statistical	41	47	6	5	11
All Other Mathematical Scientists	133	154	21	10	31
Economists, Incl. Market Research Analysts	5	5	0	0	0
Lawyers	38	43	5	2	7
Law Clerks	112	130	18	7	25
Paralegal Personnel	24	27	3	1	4
Title Searchers	12	12	0	0	0
Title Examiners & Abstractors	118	141	23	25	48
All Other Legal Assistants/Techs., Exc. Clerical	516	619	103	113	216
Registered Nurses	24	27	3	3	6
Licensed Practical Nurses	80	93	13	13	26
All Other Health Professionals, Paraprofessionals & Technicians	32	37	5	6	11
Public Rel. Specialists & Publicity Writers	46	53	7	8	15
All Other Professional, Paraprofessional, & Technical Workers	103	117	14	10	24
	454	538	84	32	116
SALES & RELATED OCCUPATIONS					
First Line Supervisors & Managers - Sales	7,109	8,474	1,365	1,059	2,424
Sales Agents & Placers, Insurance	901	1,071	170	124	294
Brokers, Real Estate	2,134	2,553	419	253	672
Sales Agents, Real Estate	438	520	82	93	175
Appraisers, Real Estate	1,114	1,327	213	240	453
Sales Agts., Securities/Commodities/Fin. Serv.	142	167	25	26	51
Sales Agents, Selected Business Services	1,707	2,046	339	232	571
All Other Sales Representatives & Salespersons, Service	118	138	20	17	37
Cashiers	227	267	40	27	67
All Other Sales & Related Workers	125	147	22	23	45
	203	238	35	24	59

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	29,340	34,979	5,639	5,713	11,352
First Line Supers.-Clerical & Admin. Support	1,616	1,929	313	210	523
Tellers	3,448	4,140	692	782	1,474
New Accounts Clerks	628	750	122	175	297
Transit Clerks	175	209	34	32	66
Loan Interviewers	171	203	32	20	52
Credit Authorizers	194	231	37	41	78
Credit Checkers	119	142	23	24	47
Loan & Credit Clerks	1,724	2,062	338	375	713
Adjustment Clerks	731	872	141	154	295
Statement Clerks	438	523	85	93	178
Brokerage Clerks	166	197	31	34	65
Insurance Adjusters, Examiners, & Investigators	1,090	1,304	214	117	331
Insurance Appraisers, Auto Damage	63	74	11	11	22
Insurance Examining Clerks	127	148	21	24	45
Insurance Claims Clerks	538	643	105	117	222
Insurance Policy Processing Clerks	1,026	1,228	202	226	428
Bill & Account Collectors	619	737	118	90	208
Real Estate Clerks	225	268	43	48	91
Legal Secretaries	20	22	2	2	4
Secretaries	3,588	4,290	702	835	1,537
Stenographers	67	76	9	11	20
Receptionists & Information Clerks	1,220	1,453	233	262	495
Typists	480	569	89	121	210
Typists, Word Processing Equipment	391	461	70	40	110
Personnel Clerks, Exc. Payroll & Timekeeping	86	99	13	18	31
Correspondence Clerks	215	256	41	44	85
File Clerks	529	631	102	145	247
Statistical Clerks	66	74	8	10	18
Bookkeeping, Accounting, & Auditing Clerks	1,921	2,288	367	376	743
Payroll & Timekeeping Clerks	94	104	10	9	19
Billing, Cost & Rate Clerks	234	276	42	46	88
General Office Clerks	3,316	3,967	651	724	1,375
Billing, Posting, & Calculating Machine Ops.	128	152	24	23	47
Duplicating Machine Operators	31	35	4	5	9
Mail Machine Operators, Preparation & Handling	103	120	17	27	44
Computer Operators, Exc. Peripheral Equipment	439	519	80	41	121
Peripheral EDP Equipment Operators	236	278	42	52	94
Data Entry Keyers, Exc. Composing	1,309	1,560	251	98	349
All Other Office Machine Operators	184	218	34	50	84
Switchboard Operators	367	433	66	91	157
Mail Clerks, Exc. Mail Machine Operators & Postal Service	317	375	58	50	108
Messengers	220	259	39	25	64
Stock Clerks - Stockroom, Warehouse, or Yard	103	121	18	8	26
All Other Material Recording/Scheduling/Dist.	188	222	34	19	53
All Other Clerical & Administrative Support	390	461	71	8	79
SERVICE OCCUPATIONS	1,949	2,313	364	298	662
First Line Supers. & Mgrs./Supers. - Service	102	118	16	18	34
Guards & Watch Guards	413	491	78	22	100
Food & Beverage Service Occupations	410	487	77	72	149
Janitors & Cleaners, Exc. Maids & Housekeeping	520	619	99	92	191
All Other Cleaning/Building Service, Exc. Private House	313	373	60	57	117
All Other Service Workers	191	225	34	37	71
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	863	1,029	166	169	335
Gardeners & Groundskeepers, Exc. Farm	863	1,029	166	169	335
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	2,378	2,802	424	219	643
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	53	60	7	2	9

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
First Line Mgrs./Supers. - Transport. Operatives	47	55	8	9	17
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	119	138	19	19	38
Inspectors & Related Occupations	23	26	3	2	5
Maintenance Repairers, General Utility	1,397	1,667	270	129	399
All Other Mechanics, Installers, & Repairers	58	65	7	3	10
Carpenters	79	93	14	9	23
Electricians	10	10	0	0	0
Painters & Paperhangers - Construction & Maintenance	103	122	19	12	31
All Other Construction Trades Workers	31	36	5	3	8
All Extraction Workers, Exc. Helpers	43	51	8	3	11
Job Printers	7	8	1	0	1
All Other Precision Printing Workers	2	2	0	0	0
All Other Precision Workers	55	64	9	4	13
Machine Setters, Operators, & Tenders	60	70	10	4	14
Hand Working, Inc. Assemblers & Fabricators	40	47	7	3	10
All Plant & System Operators	14	15	1	0	1
Truck Drivers, Light - Incl. Delivery & Route	22	23	1	0	1
All Other Motor Vehicle Operators	4	4	0	0	0
All Other Transport. & Moving Equip. Operators	39	44	5	1	6
Freight, Stock, & Material Movers, Hand	20	23	3	1	4
All Other Helpers & Laborers	152	179	27	15	42
TOTAL ALL OCCUPATIONS	55,073	65,518	10,445	9,047	19,492

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Management Support Workers
Construction & Building Inspectors

All Other Engineering & Related Technicians
Architects, Exc. Landscape & Marine

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Construction Trades Workers
Plumbers, Pipefitters, & Steamfitters

All Plant & System Operators
Stationary Engineers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

MOHAVE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	65	67	2	2	4
Financial Managers	33	35	2	2	4
General Managers & Top Executives	10	10	0	0	0
All Other Managers & Administrators	22	22	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	131	139	8	14	22
Accountants & Auditors	12	12	0	0	0
All Other Financial Specialists	41	44	3	5	8
Special Agents, Insurance	27	29	2	2	4
All Other Management Support Workers	14	15	1	1	2
Title Searchers	16	17	1	2	3
Title Examiners & Abstractors	21	22	1	4	5
SALES & RELATED OCCUPATIONS	192	208	16	29	45
First Line Supervisors & Managers - Sales	27	28	1	2	3
Sales Agents & Placers, Insurance	38	40	2	2	4
Brokers, Real Estate	13	14	1	2	3
Sales Agents, Real Estate	113	125	12	23	35
All Other Sales Representatives & Salespersons, Service	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	422	456	34	71	105
First Line Supers.-Clerical & Admin. Support	19	21	2	2	4
Tellers	167	188	21	37	58
New Accounts Clerks	24	26	2	6	8
Loan & Credit Clerks	18	19	1	3	4
Insurance Policy Processing Clerks	12	13	1	2	3
Secretaries	60	64	4	10	14
Receptionists & Information Clerks	17	17	0	2	2
Bookkeeping, Accounting, & Auditing Clerks	31	32	1	3	4
General Office Clerks	15	16	1	2	3
All Office Machine Operators	10	10	0	0	0
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	48	49	1	4	5
SERVICE OCCUPATIONS	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	17	18	1	1	2
Maintenance Repairers, General Utility	17	18	1	1	2
TOTAL ALL OCCUPATIONS	829	890	61	117	178

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Administrative Services Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Underwriters
Credit Analysts
Loan Officers & Counselors

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Adjustment Clerks
Statement Clerks
Insurance Claims Clerks
Real Estate Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

NAVAJO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	30	30	0	0	0
Financial Managers	13	13	0	0	0
General Managers & Top Executives	10	10	0	0	0
All Other Managers & Administrators	7	7	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	41	42	1	3	4
All Financial Specialists	15	16	1	2	3
All Other Management Support Workers	10	10	0	0	0
All Legal Assistants/Techs., Exc. Clerical	10	10	0	1	1
All Other Professional, Paraprofessional, & Technical Workers	6	6	0	0	0
SALES & RELATED OCCUPATIONS	24	25	1	2	3
All Sales Representatives & Salespersons, Service	21	22	1	2	3
All Other Sales & Related Workers	3	3	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	185	198	13	26	39
First Line Supers.-Clerical & Admin. Support	12	13	1	1	2
Tellers	63	70	7	13	20
New Accounts Clerks	13	14	1	3	4
Loan & Credit Clerks	16	16	0	2	2
Secretaries	32	34	2	4	6
Bookkeeping, Accounting, & Auditing Clerks	13	13	0	0	0
General Office Clerks	21	23	2	3	5
All Office Machine Operators	2	2	0	0	0
All Other Clerical & Administrative Support	13	13	0	0	0
SERVICE OCCUPATIONS	15	16	1	2	3
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	25	27	2	1	3
All First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Maintenance Repairers, General Utility	24	26	2	1	3
TOTAL ALL OCCUPATIONS	320	338	18	34	52

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts

All Legal Assistants/Techs., Exc. Clerical
Title Examiners & Abstractors

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Sales Agents & Placers, Insurance
Sales Agents, Real Estate

SERVICE OCCUPATIONS

Janitors & Cleaners, Exc. Maids & Housekeeping

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

PIMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	1,135	1,379	244	120	364
Financial Managers	349	427	78	37	115
Personnel, Training, & Labor Relations Mgrs.	15	17	2	0	2
Marketing, Advertising, & Public Rel. Mgrs.	30	32	2	1	3
Administrative Services Managers	66	78	12	4	16
Property & Real Estate Managers & Admin.	150	186	36	19	55
Food Service & Lodging Managers	33	40	7	4	11
General Managers & Top Executives	258	313	55	26	81
All Other Managers & Administrators	234	286	52	29	81
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	883	1,061	178	89	267
Underwriters	29	36	7	5	12
Credit Analysts	26	30	4	4	8
Loan Officers & Counselors	212	262	50	20	70
Accountants & Auditors	90	108	18	9	27
All Other Financial Specialists	48	55	7	2	9
Purchasing Agents, Exc. Wholesale, Retail, & Farm	8	9	1	0	1
Special Agents, Insurance	12	14	2	1	3
Personnel, Training, & Labor Rel. Specialists	11	13	2	0	2
Claims Examiners, Property & Casualty Insurance	58	70	12	5	17
All Other Management Support Workers	97	117	20	12	32
All Engineers	22	26	4	0	4
All Engineering & Related Technicians	13	15	2	0	2
Systems Analysts, Electronic Data Processing	13	15	2	0	2
Computer Programmers	7	7	0	0	0
Computer Programmer Aides	8	8	0	0	0
All Mathematical Scientists	6	6	0	0	0
Title Searchers	31	38	7	6	13
Title Examiners & Abstractors	89	110	21	19	40
All Other Legal Assistants/Techs., Exc. Clerical	7	8	1	1	2
All Health Professionals, Paraprofessionals & Technicians	4	4	0	0	0
Public Rel. Specialists & Publicity Writers	9	10	1	0	1
All Other Professional, Paraprofessional, & Technical Workers	83	100	17	5	22
SALES & RELATED OCCUPATIONS	1,865	2,304	439	301	740
First Line Supervisors & Managers - Sales	253	312	59	33	92
Sales Agents & Placers, Insurance	458	568	110	52	162
Brokers, Real Estate	193	238	45	40	85
Sales Agents, Real Estate	551	687	136	119	255
Appraisers, Real Estate	115	143	28	24	52
Sales Agts., Securities/Commodities/Fin. Serv.	193	236	43	24	67
All Other Sales Representatives & Salespersons, Service	63	76	13	6	19
Cashiers	11	12	1	1	2
All Other Sales & Related Workers	28	32	4	2	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	4,579	5,602	1,023	894	1,917
First Line Supers.-Clerical & Admin. Support	268	327	59	29	88
Tellers	1,151	1,429	278	263	541
New Accounts Clerks	212	262	50	59	109
Loan Interviewers	20	24	4	1	5
Credit Checkers	26	30	4	4	8
Loan & Credit Clerks	278	342	64	58	122
Adjustment Clerks	32	38	6	6	12
Statement Clerks	20	24	4	3	7
Insurance Adjusters, Examiners, & Investigators	52	64	12	5	17
Insurance Appraisers, Auto Damage	8	9	1	0	1
Insurance Examining Clerks	5	5	0	0	0
Insurance Claims Clerks	31	38	7	6	13
Insurance Policy Processing Clerks	129	160	31	28	59
Bill & Account Collectors	59	71	12	6	18
Real Estate Clerks	98	122	24	21	45

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Secretaries	808	998	190	182	372
Receptionists & Information Clerks	107	128	21	19	40
Typists	39	45	6	7	13
Typists, Word Processing Equipment	52	61	9	3	12
Personnel Clerks, Exc. Payroll & Timekeeping	13	14	1	2	3
File Clerks	29	33	4	5	9
Bookkeeping, Accounting, & Auditing Clerks	342	420	78	62	140
Payroll & Timekeeping Clerks	22	24	2	1	3
Billing, Cost & Rate Clerks	29	35	6	5	11
General Office Clerks	431	531	100	93	193
Billing, Posting, & Calculating Machine Opers.	23	28	5	3	8
Computer Operators, Exc. Peripheral Equipment	18	20	2	0	2
Data Entry Keyers, Exc. Composing	69	82	13	3	16
All Other Office Machine Operators	8	9	1	1	2
Switchboard Operators	70	81	11	14	25
Mail Clerks, Exc. Mail Machine Operators & Postal Service	30	35	5	2	7
Messengers	19	21	2	0	2
Stock Clerks - Stockroom, Warehouse, or Yard	20	23	3	1	4
All Other Material Recording/Scheduling/Dist.	6	6	0	0	0
All Other Clerical & Administrative Support	55	63	8	2	10
SERVICE OCCUPATIONS	463	569	106	68	174
First Line Supers. & Mgrs./Supers. - Service	36	44	8	7	15
Guards & Watch Guards	76	94	18	4	22
All Other Protective Service Workers	21	26	5	3	8
Food & Beverage Service Occupations	91	113	22	15	37
Janitors & Cleaners, Exc. Maids & Housekeeping	195	239	44	34	78
All Other Cleaning/Building Service, Exc. Private House	32	38	6	4	10
All Other Service Workers	12	15	3	1	4
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	257	319	62	51	113
Gardeners & Groundskeepers, Exc. Farm	257	319	62	51	113
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	529	650	121	43	164
All First Line Managers/Supervisors - Maintenance/Production/Construction	30	36	6	3	9
Maintenance Repairers, General Utility	354	440	86	32	118
All Other Mechanics, Installers, & Repairers	28	34	6	0	6
Carpenters	30	36	6	3	9
Painters & Paperhangers - Construction & Maintenance	28	34	6	3	9
All Other Construction Trades Workers	1	1	0	0	0
All Metal & Plastic Machine Operators	1	1	0	0	0
All Hand Workers	5	6	1	0	1
All Plant & System Operators	1	1	0	0	0
Truck Drivers, Light - Incl. Delivery & Route	31	38	7	1	8
All Other Transport. & Moving Equip. Opers.	4	4	0	0	0
All Other Helpers & Laborers	16	19	3	1	4
TOTAL ALL OCCUPATIONS	9,711	11,884	2,173	1,566	3,739

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Cost Estimators

All Engineering & Related Technicians
Drafters

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Mathematical Scientists
Financial Analysts, Statistical

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
PIMA COUNTY (CONTD.)

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Sales Agents, Selected Business Services

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Credit Authorizers
Brokerage Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

PINAL COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	62	64	2	2	4
Financial Managers	31	33	2	2	4
General Managers & Top Executives	10	10	0	0	0
All Other Managers & Administrators	21	21	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	37	38	1	3	4
All Financial Specialists	17	17	0	1	1
All Other Management Support Workers	3	3	0	0	0
All Engineering & Related Technicians	2	2	0	0	0
All Legal Assistants/Techs., Exc. Clerical	15	16	1	2	3
SALES & RELATED OCCUPATIONS	87	94	7	9	16
First Line Supervisors & Managers - Sales	15	16	1	1	2
Sales Agents & Placers, Insurance	33	36	3	3	6
Sales Agents, Real Estate	21	23	2	2	4
All Other Sales Representatives & Salespersons, Service	18	19	1	3	4
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	330	357	27	56	83
First Line Supers.-Clerical & Admin. Support	14	15	1	1	2
Tellers	106	119	13	23	36
New Accounts Clerks	21	23	2	5	7
Loan & Credit Clerks	24	25	1	4	5
Secretaries	35	37	2	5	7
Receptionists & Information Clerks	14	14	0	1	1
Bookkeeping, Accounting, & Auditing Clerks	15	15	0	1	1
General Office Clerks	53	58	5	10	15
All Office Machine Operators	1	1	0	0	0
All Other Clerical & Administrative Support	47	50	3	6	9
SERVICE OCCUPATIONS	16	17	1	0	1
Janitors & Cleaners, Exc. Maids & Housekeeping	5	5	0	0	0
All Other Service Workers	11	12	1	0	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	46	50	4	2	6
Maintenance Repairers, General Utility	22	24	2	1	3
All Other Extraction Workers, Exc. Helpers	24	26	2	1	3
TOTAL ALL OCCUPATIONS	580	622	42	72	114

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Administrative Services Managers
Property & Real Estate Managers & Admin.

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts
Loan Officers & Counselors
All Legal Assistants/Techs., Exc. Clerical
Title Searchers

SALES & RELATED OCCUPATIONS

All Other Sales Representatives & Salespersons, Service
Brokers, Real Estate

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Adjustment Clerks
Insurance Policy Processing Clerks
Bill & Account Collectors
Real Estate Clerks
File Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
SANTA CRUZ COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	14	15	1	1	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	16	17	1	1	2
All Financial Specialists	16	17	1	1	2
SALES & RELATED OCCUPATIONS	37	38	1	2	3
First Line Supervisors & Managers - Sales	5	5	0	0	0
Brokers, Real Estate	5	5	0	0	0
Sales Agents, Real Estate	6	6	0	0	0
All Other Sales Representatives & Salespersons, Service	21	22	1	2	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	122	132	10	19	29
Tellers	47	53	6	10	16
Secretaries	24	25	1	4	5
General Office Clerks -	21	23	2	3	5
All Other Clerical & Administrative Support	30	31	1	2	3
SERVICE OCCUPATIONS	9	9	0	0	0
All Protective Service Workers	4	4	0	0	0
All Food Service Workers	1	1	0	0	0
All Cleaning/Building Service, Exc. Private House	4	4	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	4	4	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	13	13	0	0	0
All Mechanics, Installers, & Repairers	6	6	0	0	0
All Metal & Plastic Mach. Set-Up Ops.	3	3	0	0	0
All Motor Vehicle Operators	1	1	0	0	0
All Helpers & Laborers	3	3	0	0	0
TOTAL ALL OCCUPATIONS	215	228	13	23	36

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

Financial Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Credit Analysts
Loan Officers & Counselors

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Sales Agents & Placers, Insurance

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
New Accounts Clerks
Loan & Credit Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Mechanics, Installers, & Repairers
Maintenance Repairers, General Utility

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

YAVAPAI COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	77	80	3	3	6
Financial Managers	25	27	2	2	4
General Managers & Top Executives	34	35	1	1	2
All Other Managers & Administrators	18	18	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	96	103	7	10	17
Loan Officers & Counselors	16	17	1	1	2
Accountants & Auditors	5	5	0	0	0
All Other Financial Specialists	15	16	1	1	2
All Other Management Support Workers	7	7	0	0	0
Title Searchers	22	24	2	3	5
Title Examiners & Abstractors	28	31	3	5	8
All Other Professional, Paraprofessional, & Technical Workers	3	3	0	0	0
SALES & RELATED OCCUPATIONS	130	139	9	14	23
First Line Supervisors & Managers - Sales	11	11	0	0	0
Sales Agents & Placers, Insurance	56	60	4	4	8
Sales Agents, Real Estate	53	58	5	9	14
All Other Sales Representatives & Salespersons, Service	10	10	0	1	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	376	403	27	55	82
First Line Supers.-Clerical & Admin. Support	11	12	1	1	2
Tellers	120	134	14	25	39
New Accounts Clerks	25	27	2	6	8
Loan & Credit Clerks	20	21	1	2	3
Secretaries	73	78	5	13	18
Receptionists & Information Clerks	7	7	0	0	0
Typists, Word Processing Equipment	10	10	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	12	12	0	0	0
General Office Clerks	36	39	3	5	8
All Communication Equipment Operators	2	2	0	0	0
All Other Clerical & Administrative Support	60	61	1	3	4
SERVICE OCCUPATIONS	25	26	1	2	3
All Protective Service Workers	4	4	0	0	0
All Food Service Workers	15	16	1	2	3
Janitors & Cleaners, Exc. Maids & Housekeeping	6	6	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	10	11	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	8	8	0	0	0
All Mechanics, Installers, & Repairers	3	3	0	0	0
All Construction Trades Workers	5	5	0	0	0
TOTAL ALL OCCUPATIONS	722	770	48	85	133

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Food Service & Lodging Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Credit Analysts

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Brokers, Real Estate
Sales Agts., Securities/Commodities/Fin. Serv.

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Loan Interviewers
Insurance Adjusters, Examiners, & Investigators
Real Estate Clerks

ESTIMATED EMPLOYMENT AND JOB OPENINGS
FINANCE, INSURANCE, AND REAL ESTATE
YAVAPAI COUNTY (CONTD.)

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

Gardeners & Groundskeepers, Exc. Farm

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Construction Trades Workers
Carpenters

ESTIMATED EMPLOYMENT AND JOB OPENINGS

FINANCE, INSURANCE, AND REAL ESTATE

YUMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	50	52	2	2	4
General Managers & Top Executives	14	14	0	0	0
All Other Managers & Administrators	36	38	2	2	4
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	61	65	4	6	10
Loan Officers & Counselors	16	17	1	1	2
All Other Financial Specialists	11	12	1	1	2
All Other Management Support Workers	16	17	1	1	2
All Engineering & Related Technicians	1	1	0	0	0
Title Searchers	10	11	1	2	3
All Other Legal Assistants/Techs., Exc. Clerical	7	7	0	1	1
SALES & RELATED OCCUPATIONS	58	60	2	2	4
First Line Supervisors & Managers - Sales	19	20	1	1	2
Sales Agents & Placers, Insurance	23	24	1	0	1
All Other Sales Representatives & Salespersons, Service	16	16	0	1	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	401	433	32	65	97
Tellers	144	161	17	31	48
New Accounts Clerks	20	22	2	5	7
Loan & Credit Clerks	42	45	3	7	10
Bill & Account Collectors	10	10	0	0	0
Real Estate Clerks	41	44	3	7	10
Secretaries	43	46	3	6	9
Receptionists & Information Clerks	5	5	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	17	17	0	0	0
General Office Clerks	25	27	2	5	7
All Office Machine Operators	8	8	0	0	0
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	45	47	2	4	6
SERVICE OCCUPATIONS	1	1	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	35	38	3	6	9
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	73	79	6	5	11
Maintenance Repairers, General Utility	59	64	5	4	9
All Construction Trades Workers	1	1	0	0	0
Machine Setters, Operators, and Tenders	1	1	0	0	0
All Motor Vehicle Operators	1	1	0	0	0
All Helpers & Laborers	11	12	1	1	2
TOTAL ALL OCCUPATIONS	679	728	49	86	135

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Financial Managers

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Credit Analysts

All Other Management Support Workers
Special Agents, Insurance

All Other Legal Assistants/Techs., Exc. Clerical
Title Examiners & Abstractors

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Sales Agents, Real Estate

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Office Machine Operators
Billing, Posting, & Calculating Machine Oper.

All Other Clerical & Administrative Support
First Line Supers.-Clerical & Admin. Support
Insurance Policy Processing Clerks

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

Gardeners & Groundskeepers, Exc. Farm

METHODOLOGY

Sample Selection and Response Rates

Occupational estimates for the finance, insurance, and real estate industry were developed from a survey of employers throughout the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 1,617 firms with a usable response rate of 77 percent. Firms responding accounted for 91 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total FIRE employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections and represents the second stage of the forecasting methodology.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy.¹ The "Total Job Openings" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

¹ "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

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JULY 1986

Arizona Occupational Profile

A Labor Market Information Publication
of the Department of Economic Security



SERVICES



OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program--a cooperative effort between Arizona and the U.S. Bureau of Labor Statistics.

This *Occupational Profile* is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 700 occupations in Arizona. From these surveys, which required the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The *Occupational Profiles* contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining	Finance, Insurance, and Real Estate
Construction	Services
Manufacturing	Hospitals
Transportation, Communications, and Public Utilities	Educational Services
Trade	Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY DESCRIPTION

Firms classified in the services industry represent those engaged in providing a wide range of services for individuals, businesses, government establishments, and other organizations. Included are hotels and lodging places; membership organizations (which include tribal councils and offices in American Indian communities); establishments providing personal, business, repair, and amusement services; health, legal, engineering, and other professional services; and miscellaneous services.

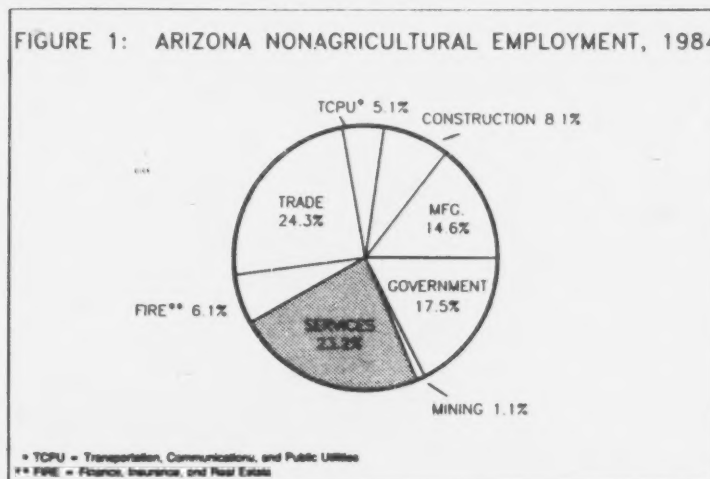
Establishments providing specialized services closely allied to mining, transportation, government, and other industries are classified in those divisions and not in the services industry. **IMPORTANT:** Education and public service (government) employment is excluded from this study as each is the subject of an individual study and publication.

A detailed description of the services industry can be found in the *Standard Industrial Classification Manual*¹ under codes 70 through 89.

INDUSTRY CHARACTERISTICS

Employing approximately 274,000 or 23 percent of Arizona's 1.2 million workers in 1984, services represents the state's second largest industry based on employment--trailing only trade. Depending on the industry classification system used, however, services can qualify as the state's largest. Most employees in Arizona schools are state government employees and, as such, are generally classified in the government sector. If one chooses to include these 98,000 workers in the educational services, the service sector swells to more than 370,000 employees and becomes the state's largest industry--followed by trade and manufacturing.

FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1984



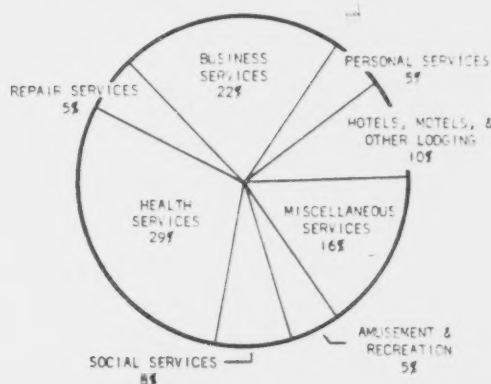
¹ Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 295-334.

Economists and others often make the distinction between service- and goods-producing sectors of the economy. The services industry is included in the service-producing sector along with the other service-producing industries: transportation, communication, and public utilities; trade; and finance, insurance, and real estate. Government employment may be considered part of the service-producing sector or it may be viewed separately.

As one of the service-producing industries, employment in services generally rides the coattails of activity in "basic" or goods-producing firms. Workers in a plant manufacturing aircraft engines, for example, support area establishments providing health, personal, and auto repair services. In Arizona, however, because of the importance of tourism, many service-producing industries also "import dollars" in the same way as the export of manufactured products. The hotel/motel industry could be considered, at least in part, to be a basic industry since it provides more jobs and dollars than would be necessary to support the local population.

The services industry consists of a wide range of firms (as described in the industry description on page 1) that attempt to meet the needs of the resident and nonresident population. Firms rendering health services employ more than 80,000 people or nearly 30 percent of all services employment and, based on employment, represent the state's largest service industry. Hospitals account for 60 percent of health services employment and are followed by physicians' offices (13 percent) and nursing and personal care facilities (10 percent).

FIGURE 2: EMPLOYMENT DISTRIBUTION IN ARIZONA'S SERVICES INDUSTRY - 1984



The second largest service industry, business services, employed 61,000 in 1984, and is dominated by temporary-help services, such as manpower pools, labor pools, and modeling services. Although temporary-help agencies employ a relatively large number of workers, it is important to remember that the labor pool placed in temporary jobs is included on the payroll of the agencies. Most of the larger employment agencies specialize in placing medical workers. Also prominent in the business services category are firms that provide cleaning and maintenance services to buildings and dwellings and those providing computer and data processing services.

Rounding out the state's three largest service industries based on employment is the hotel and motel industry with employment of nearly 28,000 in 1984.

Heavily dependent upon the needs of the local community one would expect that the geographic distribution of Arizona's services employment and population is similar. In reality, however, a greater concentration of service workers is employed in Maricopa County which, in addition to being a regional service center, is disproportionately represented by firms providing business and health services. Evidence of this can be seen in figure 6 which reveals much about the nature of service industries in Arizona. By reading down a column for any county, the table indicates the relative size of each industry component by providing the number of employees in the industry per 1,000 population. In Coconino County, for example, the table indicates the prominence of the hotel/motel industry followed by social services and membership organizations. Reading across, the indices indicate that the ratio of hotel/motel

FIGURE 3 GEOGRAPHIC DISTRIBUTION OF ARIZONA'S SERVICES EMPLOYMENT, 1984

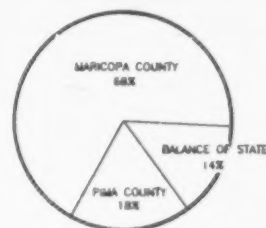


FIGURE 4: SERVICES EMPLOYMENT PER 1,000 POPULATION
- AN EMPLOYMENT INDEX BY COUNTY, 1984 -

INDUSTRY	COUNTY	ARIZONA	COCHISE	COCONINO	GILA	GRAND/DEER	LA PAZ	MARICOPA	MOHAVE	NAHUAL	PIRENE	PINAL	PIMA	SANTA CRUZ	TAHARA	TOTAL
HOTELS/MOTELS	5	5	59	8	5	6	9	15	6	7	4	16	5	5		
PERSONAL SERVS.	1	2	5	1	5	*	6	1	5	1	1	2	5			
BUSINESS SERVS.	1	5	5	5	1	29	5	2	14	1	6	2	5			
AUTO REPAIR	*	1	5	1		1	5	2	1	4	1	2	1	5		
MISC. REPAIR	*	*	1	*	1	*	2	1	1	1	1	*	1	1		
MOTION PICTURES	1	*	1	*	1	1	1	*	*	*	*	*	5	1		
AMUSE. & REC.	1	2	10	1	*	1	5	4	5	6	2	7	5	5		
HEALTH SERVS.	20	10	17	19	14	8	51	18	15	50	10	11	22	17		
LEGAL SERVS.	1	1	1	1	*	*	4	1	*	5	*	1	1	1		
SOCIAL SERVS.	50	5	20	5	2	0	5	5	11	8	12	1	4	4		
MUSEUMS, ETC.	*	*	1	*	*	*	*	*	*	*	*	1	*	*		
MEMBERSHIP ORG.	47	2	15	18	*	24	2	5	45	4	6	1	2	1		

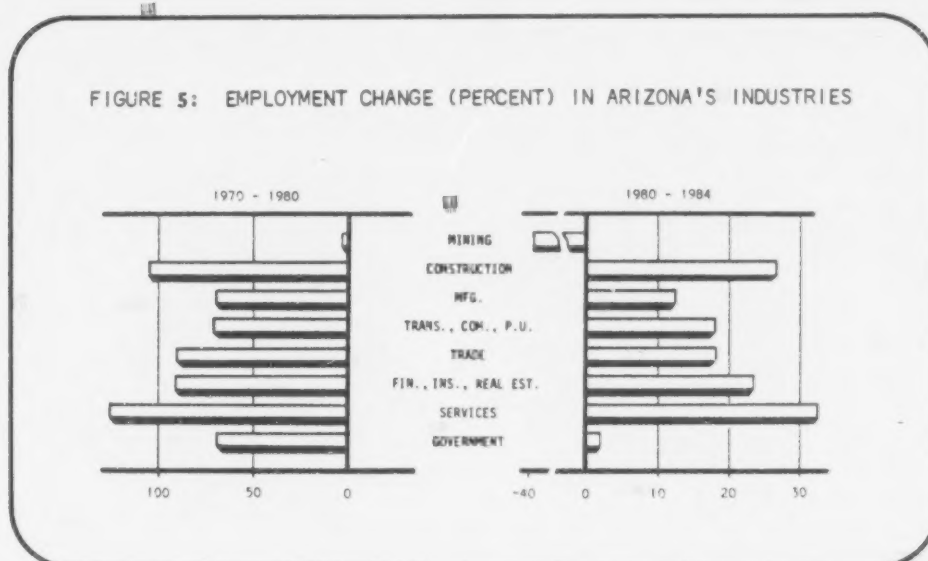
employment to population in Coconino County is much greater than that for any other county.

Of the 60,000 firms doing business in Arizona, 20,000 are engaged in providing services. This is compared to the trade industry which follows with approximately 13,000 firms. Most firms providing services are small--employing less than 10 employees. The few firms that employ more than 1,000 persons are mostly hospitals and national or regional headquarters of hotel/motel chains.

INDUSTRY TRENDS

In the decade of the 70s, services employment more than doubled and now accounts for more than 23 percent of all Arizona workers--up from 17 percent in 1970 and 20 percent in 1980. Such growth, combined with rapid expansion in the trade and finance, insurance, and real estate industries, reflects the continuing evolution of our economy into one that is primarily service-producing rather than goods-producing.

FIGURE 5: EMPLOYMENT CHANGE (PERCENT) IN ARIZONA'S INDUSTRIES



This evolution mirrors, to a large degree, changes that are occurring nationally and in other industrialized countries. Evident since the Great Depression, the shift of U.S. employment to the service sector came primarily during the decades following World War II. Demand for consumer goods in the wake of the depression and the war spawned an economy in which one worker in three was employed in manufacturing--a ratio that declined to one in five by 1983. U.S. employment in the service sector rose 16.7 million between 1972 and 1983 while goods-producing industries lost 274,000 workers.

Partially the result of employment losses in manufacturing, agriculture, and mining, the dramatic shift of employment to service-producing industries moreover reflects the sector's rapid growth to meet the demands of a changing society. It has been influenced by such factors as the increased demand for consumer services previously produced outside the measured market economy, the increased demand for leisure goods and services, shifts from internal to external sources for business services, i.e., marketing and accounting, and the increasing importance of the service sector in U.S. international trade.

Expansion in the service sector is as much a result of the changing composition of the labor force as it is of the general increase in the demand for services. Since 1950, three of every five new workers have been women. Many of these women found employment in the rapidly expanding services industry which has, over the past two decades, created 86 percent of all new jobs in the U.S. economy. Greater participation by women in the workplace has created a greater demand for consumer and social services such as day care. Concurrently, the resulting increases in family incomes have allowed a greater percentage of that income to be spent on leisure, recreation, education, and other life-style needs as opposed to basic necessities.

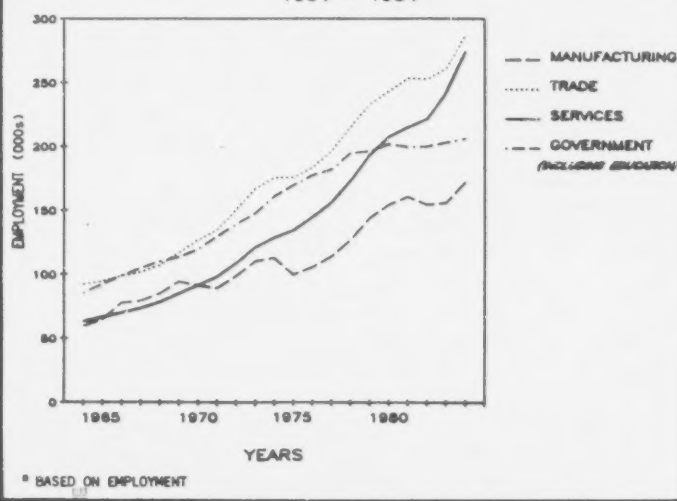
FIGURE 6: U.S. EMPLOYMENT IN GOODS- AND SERVICE-PRODUCING INDUSTRIES, 1930 AND 1980

Industry	1980 Employment (000s)	Percent Distribution	
		1930	1980
Goods-Producing Sector	23,394	46.75	25.05
Mining	937	4.5	1.1
Construction	3,940	3.2	4.4
Manufacturing	19,497	39.0	20.5
Service-Producing Sector	66,764	53.3	74.0
Transportation/Public Util.	4,058	14.6	5.6
Trade	20,906	16.3	23.1
Wholesale	5,239	—	5.9
Retail	15,545	—	17.2
Finance, Insurance, and Real Estate	8,487	4.3	6.1
Services	19,446	8.6	21.8
Government	15,651	9.5	17.6
Total	90,136	100.05	100.05

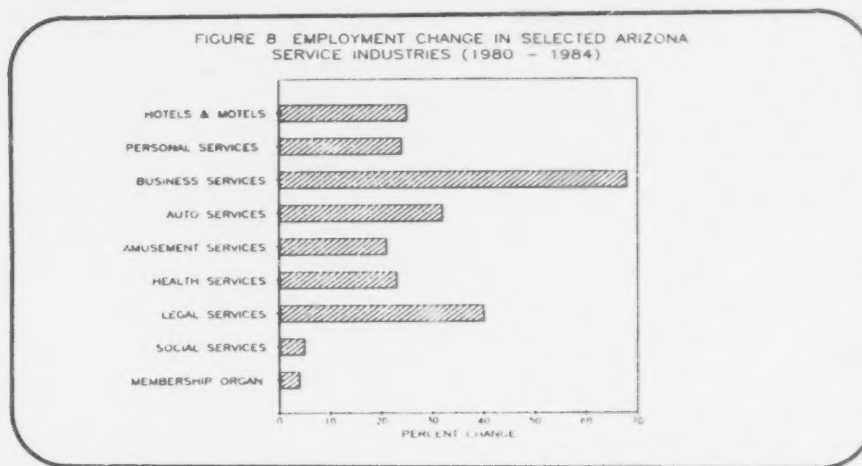
NOTE: Detail may not add up to totals due to rounding.

In Arizona, services employment has been increasing faster than any other industry category. Less vulnerable than goods-producing industries to fluctuations in the national economy, employment in services has shown year-to-year increases even during economic downturns. The industry's rapidly expanding share of Arizona employment, which now stands at 23 percent, is all the more remarkable against an economic backdrop in which nearly all major industry categories are expanding. The relative prominence of Arizona's service industry is not being bolstered by declining manufacturing employment, as is the case nationally. Although the goods-producing industries of agriculture and mining have lost employment locally, manufacturing employment has, over the years, expanded substantially.

FIGURE 7: EMPLOYMENT IN ARIZONA'S FOUR LARGEST* INDUSTRIES 1964 - 1984



Although "robust" might be used to describe growth of the services industry in Arizona, the description seems understated when applied to activity in business services. Expanding nearly 70 percent in four years (as compared to 31 percent in all service industries), firms that provide business services created nearly 25,000 new jobs between 1980 and 1984. Most notable in the business services group are temporary help supply services whose employment more than doubled in the four-year period ending in 1984. Employing 5,300 in 1980, firms that provide personnel supply services employed nearly 13,000 four years later. These firms provide help, usually temporary, on a contract basis to other businesses. The help supplied is under the direction or general supervision of the business to whom the help is furnished; however, the help is always on the payroll of the supplying establishment.



Once predominately active in medical and clerical services, personnel supply agencies are providing an ever-increasing variety of occupational skills to companies and firms that wish to benefit from not employing their own workers. These benefits include a reduction of paperwork and flexibility in responding to fluctuating personnel requirements resulting from cyclical business patterns. Also boosting demand, according to Jeannie Love of Manpower Temporary Services in Phoenix, is the effect of technology in the workplace. "Manpower Temporary Services," according to Love, "provides a growing number of trained workers to employers who have recently installed sophisticated office equipment. Rather than train staff to use this equipment, employers often choose to contract for workers who already have the necessary skills."

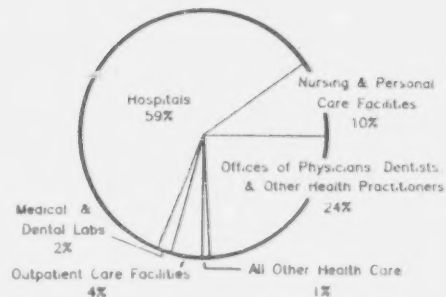
The outlook for firms providing personnel supply services is for continued strong growth. Optimism resulting from the prospects of continued prosperity must be tempered, however, by the potential ramifications of an economic downturn on a working population that has an untraditional attachment to jobs and employers.

Other types of business services that have registered strong employment gains in recent years are research and development laboratories and firms that provide computer and data processing services, equipment and leasing services, direct mail advertising services, and management, consulting, and public relations services.

As the largest service industry in Arizona, health services has a profound impact on the labor market in the state. This sector's greatest share of employment is employed in hospitals while most of the balance is distributed to physicians' and dentists' offices, and nursing and outpatient care facilities. For the period 1980-1984, health services employment in Arizona expanded 23 percent and added more than 15,000 new jobs to its ranks. Although hospitals provided the greatest number of job opportunities, its rate of employment growth during the period

trailed that of most other health services providers. Registering strong growth in recent years are outpatient care facilities and those rendering nursing and personal care. This trend is expected to continue as the role of hospitals and their relationship with other health providers is redefined by prevailing social and economic forces. Many industry representatives and analysts observe that hospitals are becoming more acute care oriented. The continued growth of walk-in surgical centers, extended and out-patient care facilities, and home health-care providers represents both a cause and result of the greater emphasis that hospitals are placing on acute care.

FIGURE 9: EMPLOYMENT DISTRIBUTION IN ARIZONA'S HEALTH SERVICES INDUSTRY - 1984



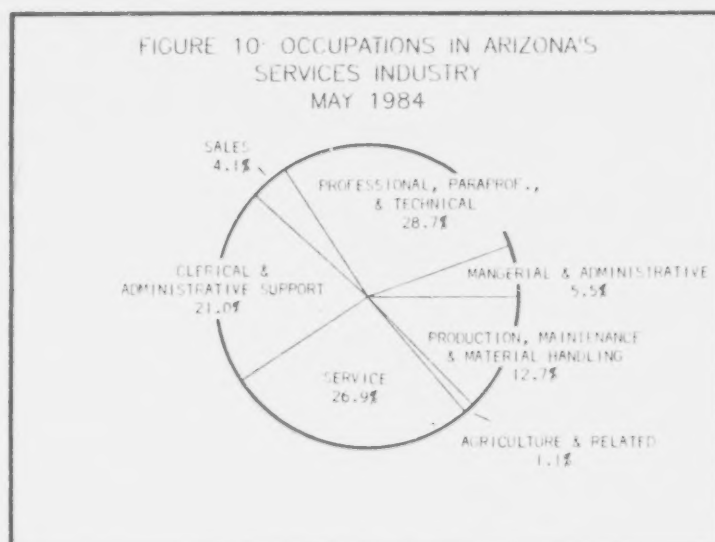
Like hospitals, the hotel/motel industry is in an era of significant change as more large corporations, chain organizations, and franchise operations increase their share of the market. Since 1980, the number of hotels and motels in Arizona that have payrolls increased little more than 1 percent annually while employment in these establishments showed yearly increases of about 6 percent. The marginal increase in the number of lodging places is in contrast to actual year-to-year declines that were registered in the late 1970s. Still, the trend is to large hotels and resorts that in some cases replace smaller units.

Not all service industries experienced the rapid employment increases that typify the service sector as a whole. Registering only slight increases were noncommercial museums, galleries and gardens; non-government providers of social services; and membership organizations.

With nearly 3,000,000 residents, Arizona's population has increased at a 3.4 percent annual growth rate over the last ten years. Annual employment increases averaging over 4 percent and growth in personal income of more than 12 percent over the last decade reflect an expanding and vibrant economy. Projected personal income statistics released recently by the Bureau of Economic Analysis, U.S. Department of Commerce, echo the predictions of other analysts in their forecasts of continued growth in personal income for Arizona's residents. Although predictions vary, they consistently rank Arizona above all or most other states based on anticipated personal income growth. Fostered by such expansion, employment in the state's services industry is predicted to increase nearly 25 percent, or 160,000, between 1984 and 1988.

OCCUPATIONAL ANALYSIS

Representing firms that engage in such diverse activities as advertising, computer programming, clock repair, and karate instruction, the services industry is comprised of workers with a variety of skills and talents. The greatest share of these workers is employed in the rapidly expanding professional and technical category. Accounting for more than one worker in four, this occupational group reflects the breadth of the industry's services. Although employment of registered nurses (14,153), licensed practical nurses (4,964), and physicians and surgeons (4,103) rank highest, the professional workers category includes everything from music directors (12) to embalmers (68).



As shown in figure 10, the second largest share of workers in the service industry is categorized in service occupations, i.e., those who provide personal, protective, and cleaning services. Occupations in this category with the greatest employment are janitors and cleaners (7,900); maids and housekeeping cleaners (7,493); and nursing aides, orderlies, and attendants (6,649).

Clerical workers constitute the third largest occupational group. Common to nearly all firms, these workers numbered more than 53,000 in May 1984--led by secretaries (7,125), general office clerks (5,960), and bookkeeping, accounting, and auditing clerks (5,883).

Representing some of Arizona's fastest growing industries, firms that render services are expected to increase their employment nearly 60,000 between 1984 and 1988. The kinds of workers needed will depend on the interplay of demographic, economic, social, and technological factors and the resulting demand for services.

Expansion in health and business services has contributed to strong demands for a variety of professional and technical occupations ranging from accountants to x-ray technicians. In fact, since this study of services was first conducted in 1978, professional and technical workers have dramatically increased their share of total industry.

FIGURE 11: PROFESSIONAL AND TECHNICAL
OCCUPATIONS IN ARIZONA'S SERVICES INDUSTRY
MAY 1984

Occupation	Employment
Registered Nurse	14,153
General Managers & Top Execs.	5,229
Licensed Practical Nurses	4,964
Physicians & Surgeons	4,103
Accountants & Auditors	3,170
Lawyers	3,027

Registered nurses, with employment of more than 14,000, represent the industry's most numerically prominent professional occupation. Although most are employed in hospitals, registered nurses will find an increasing number of job opportunities outside the hospital environment--in walk-in surgical centers, freestanding emergency centers, and home-health systems, for example. In fact, the organizational structuring of the health industry is regarded by many as revolutionary. Forces to expand the health industry by a growing and aging population, for example, will be concurrent with broad based cost containment efforts. The challenge to provide more care for less money will result in changing reimbursement mechanisms and health services delivery systems as is evidenced by rising enrollments in health maintenance organizations (HMOs); growing acceptance of Individual Practice Associations (IPAs); and prospective payment systems.

In competition for the health care dollar, new services such as birthing and diagnostic imaging centers, and the movement to preventive health care represent only some of the many changes that are providing new employment settings and job opportunities. For example, a growing proportion of physicians, dentists, and other practitioners will take salaried positions in health maintenance organizations and corporations rather than establish individual practices. The trend is in the opposite direction for many traditionally salaried workers, such as nurses and therapists, who are increasingly entering private practice. Also on the horizon are more employment opportunities in such varied settings as hospitals, adult day care programs, group homes, and wellness centers.

In addition to the health services industry, professional and technical workers are concentrated in such rapidly growing business services industries as data processing, engineering, legal, and management consulting. Since 1978, employment of those providing management, consulting, and public relations services has more than doubled. Services provided by these firms include, for example, management of a physician's business and financial affairs, and consulting services such as business analysis, city planning, marketing research, site location, and lobbying.

FIGURE 12: OCCUPATIONS IN ARIZONA'S
BUSINESS SERVICES INDUSTRY, MAY 1984

Occupation	Employment
Janitors & Cleaners	5,352
Guards & Watch Guards	4,150
General Office Clerk	2,420
General Managers & Top Execs.	2,119
Secretaries	2,099
Misc. Helpers & Laborers	1,937
Bookkeeping, Accounting, & Auditing Clerks	1,764

With employment of only 2,000, firms providing research and development services have, nonetheless, distinguished themselves by quadrupling their total employment between 1978 and 1984. Laboratories in this industry work on a contract or fee basis to conduct agricultural, chemical, and engineering research and to develop computer hardware. Because of the technical nature of their work, research and development firms generally employ many highly educated personnel, such as engineers, computer specialists, and scientists.

Although not expanding as rapidly as professional and technical occupations, service workers will provide the greatest number of job opportunities. Occupations in this category reflect the prominence of the state's lodging industry. In fact, of every three employed in Arizona's lodging industry, two are service workers. Numerically prominent service workers include maids and housekeeper cleaners (7,493) and food and beverage service occupations such as waiters and waitresses (5,053). Also concentrated in lodging are the service industry's 2,000 dining room and cafeteria attendants and 3,000 cooks.

FIGURE 13: OCCUPATIONS WITH THE GREATEST EMPLOYMENT IN ARIZONA'S LODGING INDUSTRY
MAY 1984

Occupation	Employment
Maids & Housekeeping Cleaners	5,136
Waiters & Waitresses	3,867
Hotel Desk Clerks	1,817
Dining Room/Cafeteria Attds.	1,515
Restaurant Cooks	1,317
Food Preparation Workers	1,284
Maintenance Repairers,	914
General Utility	

Job opportunities for these and other workers in the lodging industry will continue to be plentiful. Employment in hotels, motels, and other lodging facilities is predicted to increase approximately 24 percent between 1984 and 1988. Much of this growth will result from expansion of the state's economy and the maturation of Phoenix and Tucson as regional economic centers. Cecil Ravenswood, general manager at The Arizona Biltmore, observes that the state's expanding and diversifying economy has brought an entirely new clientele to the state. "Once almost exclusively a resort destination, Arizona now hosts a large and growing number of business travelers" says Ravenswood, who cites registrations for a day in February which indicate that 8 of 10 guests at the Biltmore were business travelers.

Also boosting employment in the lodging industry will be continued recognition of the state's recreational and leisure opportunities. To accommodate more leisure and business travellers, the industry is expected to total 35,000 in 1988. In addition to the openings resulting from industry growth, these and many other service occupations are characterized by higher-than-average replacement needs as workers transfer to other occupations, assume full-time household responsibilities, return to school, or stop working for other reasons.

In the personal services category, employment of hairdressers, hairstylists, and cosmetologists dominate with employment of nearly 5,000. Employment of these workers will be boosted by the growing number of middle-age persons who are the primary users of cosmetology services and the rising number of working women. Population expansion and the increasing popularity of hairstyling among men will reverse sagging employment of barbers. Those who specialize in hair styling will continue to be in stronger demand than barbers who offer conventional services.

FIGURE 14: OCCUPATIONS WITH THE GREATEST
EMPLOYMENT IN ARIZONA'S SERVICES INDUSTRY

	Employment 1984	Job Openings* 1984-1988
Registered Nurses	14,153	5,095
Janitors & Cleaners, Exc. Maids & Housekeeping	7,900	3,643
Maids & Housekeeping Cleaners	7,493	3,438
Secretaries	7,125	3,326
Nursing Aides, Orderlies, & Attendants	6,649	2,539
General Office Clerks	5,960	2,661
Bookkeeping, Accounting, & Auditing Clerks	5,883	2,546
General Managers & Top Executives	5,229	1,935
Guards & Watch Guards	5,104	1,771
Waiters & Waitresses	5,053	2,390
Receptionists & Information Clerks	5,030	2,091
Licensed Practical Nurses	4,964	2,000
Hairdressers, Hairstylists, & Cosmetologists	4,868	2,715
Physicians & Surgeons	4,103	1,214
Accountants & Auditors	3,170	1,259
Lawyers	3,027	1,189
Food Preparation Workers	2,851	1,075
Maintenance Repairers, General Utility	2,776	834
Automotive Mechanics	2,614	934
Legal Secretaries	2,539	1,329
Drafters	2,382	884
Cashiers	2,361	1,034
Teachers, Preschool & Kindergarten	2,148	995
First Line Supr. - Clerical & Admin. Support	2,109	705
Data Entry Keyers, Excluding Composing	2,094	678
Dining Room/Cafeteria Atttds. & Bartdr. Helpers	2,075	595
Typists	2,042	895
Counter & Rental Clerks	2,035	1,043
Gardeners & Groundskeepers, Exc. Farm	2,035	858
Laundry/Dry Cleaning Mach. Opers., Exc. Pressing	1,958	651
Financial Managers	1,916	600
Medical Assistants	1,856	681
Interviewing Clerks, Exc. Personnel & Welfare	1,839	732
Hotel Desk Clerks	1,817	812
Dental Assistants	1,796	760

* Does not include turnover.

FIGURE 15: OCCUPATIONS WITH THE GREATEST
EMPLOYMENT AND JOB OPENINGS IN SERVICES

LARGEST OCCUPATIONS BY COUNTY	ESTIMATED 1984 EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1984-1988	ESTIMATED OPENINGS 1984-1988
APACHE				
Secretaries	264	7.0%	Secretaries	108
Teacher Aides & Ed. Assistants	147	3.9	Teacher Aides & Ed. Assistants	52
Social Workers, Exc. Med./Psych.	103	2.7	Dietetic Technicians	37
Dietetic Technicians	99	2.6	Social Workers, Exc. Med./Psych.	36
Bookkeeping/Account/Audit Clerks	85	2.3	Typists	36
COCHISE				
Registered Nurses	159	6.8%	Engineers	66
Nursing Aides/Orderlies/Attend.	120	5.1	Registered Nurses	53
Engineers	95	4.0	Nursing Aides/Orderlies/Attend.	45
Waiters & Waitresses	87	3.7	Waiters & Waitresses	32
Maids & Housekeeping Cleaners	76	3.2	Maids & Housekeeping Cleaners	29
COCONINO				
Maids & Housekeeping Cleaners	646	8.5%	Maids & Housekeeping Cleaners	275
Waiters & Waitresses	486	6.4	Waiters & Waitresses	197
Hotel Desk Clerks	261	3.4	Hotel Desk Clerks	103
Food Preparation Workers	239	3.1	Food Preparation Workers	83
Janitors & Cleaners, Exc. House.	206	2.7	Janitors & Cleaners, Exc. House.	76
GILA				
Maids & Housekeeping Cleaners	124	6.5%	Maids & Housekeeping Cleaners	51
Licensed Practical Nurses	114	5.9	Licensed Practical Nurses	38
Nursing Aides/Orderlies/Attend.	92	4.8	Nursing Aides/Orderlies/Attend.	35
Waiters & Waitresses	74	3.9	Waiters & Waitresses	28
Typists	62	3.2	Typists	26
GRAHAM & GREENLEE				
Nursing Aides/Orderlies/Attend.	65	9.6%	Nursing Aides/Orderlies/Attend.	23
Maids & Housekeeping Cleaners	52	7.7	Maids & Housekeeping Cleaners	16
Registered Nurses	51	7.6	Registered Nurses	16
Hairdressers & Cosmetologists	26	3.9	Hairdressers & Cosmetologists	10
General Office Clerks	21	3.1	Licensed Practical Nurses	4
LA PAZ				
Secretaries	24	4.9%	Secretaries	7
Teacher Aides & Ed. Assistants	22	4.5	Teacher Aides & Ed. Assistants	7
Waiters & Waitresses	19	3.9	Maids & Housekeeping Cleaners	6
Maids & Housekeeping Cleaners	18	3.7	Teachers, Preschool & Kinder.	4
Maintenance Repairers, General	17	3.5	Waiters & Waitresses	4
MARICOPA				
Registered Nurses	9,412	5.5%	Registered Nurses	3,441
Janitors & Cleaners, Exc. House.	5,392	3.1	Janitors & Cleaners, Exc. House.	2,459
Secretaries	4,856	2.8	Secretaries	2,348
General Office Clerks	4,354	2.5	General Office Clerks	2,047
Bookkeeping/Account/Audit Clerks	4,346	2.5	Bookkeeping/Account/Audit Clerks	1,981

FIGURE 15: OCCUPATIONS WITH THE GREATEST
EMPLOYMENT AND JOB OPENINGS IN SERVICES

LARGEST OCCUPATIONS BY COUNTY	ESTIMATED 1984 EMPLOYMENT	PCT. OF COUNTY TOTAL	HIGHEST DEMAND OCCUPATIONS 1984-1988	ESTIMATED OPENINGS 1984-1988
MOHAVE				
Maids & Housekeeping Cleaners	331	11.8%	Maids & Housekeeping Cleaners	138
Hotel Desk Clerks	123	4.4	Hotel Desk Clerks	49
Waiters & Waitresses	120	4.3	Waiters & Waitresses	45
Registered Nurses	94	3.4	Registered Nurses	31
Licensed Practical Nurses	83	3.0	Licensed Practical Nurses	28
NAVAJO				
Maids & Housekeeping Cleaners	200	4.6%	Maids & Housekeeping Cleaners	82
Maintenance Repairers, General	151	3.5	Switchboard Operators	62
Teacher Aides & Ed. Assistants	131	3.0	Teacher Aides & Ed. Assistants	45
Secretaries	114	2.6	Waiters & Waitresses	41
Waiters & Waitresses	104	2.4	Secretaries	37
PIMA				
Registered Nurses	3,309	7.0%	Registered Nurses	1,182
Janitors & Cleaners, Exc. House.	1,807	3.8	Janitors & Cleaners, Exc. House.	948
Nursing Aides/Orderlies/Attend.	1,634	3.4	Maids & Housekeeping Cleaners	717
Maids & Housekeeping Cleaners	1,384	2.9	Secretaries	673
Secretaries	1,333	2.8	Hairdressers & Cosmetologists	660
PINAL				
Registered Nurses	140	5.7%	Registered Nurses	46
Maids & Housekeeping Cleaners	101	4.1	Counter & Rental Clerks	45
Secretaries	86	3.5	Maids & Housekeeping Cleaners	38
Waiters & Waitresses	83	3.4	Waiters & Waitresses	32
Counter & Rental Clerks	61	2.5	Hairdressers & Cosmetologists	27
SANTA CRUZ				
Maids & Housekeeping Cleaners	77	7.4%	Inspectors, Testers, & Related	49
Registered Nurses	68	6.5	Maids & Housekeeping Cleaners	34
Inspectors, Testers, & Related	60	5.7	Hand Packers & Packagers	23
Waiters & Waitresses	54	5.2	Registered Nurses	21
Gardeners & Groundskeepers	39	3.7	Waiters & Waitresses	19
YAVAPAI				
Registered Nurses	230	8.4%	Registered Nurses	78
Maids & Housekeeping Cleaners	183	6.7	Maids & Housekeeping Cleaners	72
Nursing Aides/Orderlies/Attend.	136	5.0	Nursing Aides/Orderlies/Attend.	50
Receptionists & Info. Clerks	101	3.7	Receptionists & Info. Clerks	41
Secretaries	73	2.7	Hairdressers & Cosmetologists	32
YUMA				
Registered Nurses	204	5.4%	Guards & Watch Guards	75
Maids & Housekeeping Cleaners	185	4.9	Maids & Housekeeping Cleaners	72
Nursing Aides/Orderlies/Attend.	161	4.3	Registered Nurses	68
Licensed Practical Nurses	152	4.0	Nursing Aides/Orderlies/Attend.	60
Guards & Watch Guards	114	3.0	Licensed Practical Nurses	54



OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. Graham and Greenlee counties have been combined due to their close proximity, similar economies, and size.

When using the data, please note the following:

- 1) Services employment growth in each of the nonmetropolitan counties reflects the rate calculated for the "balance of state" (Arizona less Maricopa and Pima counties).
- 2) The data reflect full and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.
- 3) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.
- 4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "All Other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.
- 5) The projection technique does not possess the degree of accuracy that may be implied by unrounded numbers.
- 6) Data for occupations with employment of less than five are included in the appropriate "All Other" categories. These occupations are not listed, however, in the summary of "All Other" categories which follows each table.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	13,933	5.5	17,117	4,714
Financial Managers	1,916	.8	2,339	600
Personnel, Training, & Labor Relations Mgrs.	364	.1	423	85
Purchasing Managers	149	.1	171	31
Marketing, Advertising, & Public Rel. Mgrs.	765	.3	965	289
Administrative Services Managers	790	.3	973	254
Education Administrators	140	.1	171	42
Medicine & Health Services Managers	1,279	.5	1,457	309
Property & Real Estate Managers & Admin.	16	.0	20	6
Construction Managers	94	.0	121	37
Food Service & Lodging Managers	1,083	.4	1,318	379
General Managers & Top Executives	5,229	2.1	6,574	1,935
All Other Managers & Administrators	2,108	.8	2,585	747
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	73,068	28.7	88,347	25,876
Management Support Occupations	7,472	2.9	9,268	2,748
Credit Analysts	51	.0	65	24
Tax Preparers	415	.2	521	164
Accountants & Auditors	3,170	1.2	3,986	1,259
Budget Analysts	72	.0	82	16
All Other Financial Specialists	186	.1	230	57
Purchasing Agents, Exc. Wholesale, Retail, & Farm	328	.1	392	91
Employment Interviewers	460	.2	589	181
Personnel, Training, & Labor Rel. Specialists	712	.3	869	225
Cost Estimators	135	.1	172	64
Management Analysts	71	.0	93	37
Compliance & Enforcement Inspectors, Exc. Const.	149	.1	172	39
All Other Management Support Workers	1,723	.6	2,097	591
Engineers & Related Occupations	8,678	3.4	11,127	3,165
Engineers	25	.0	28	3
Aeronautical and Astronautical Engineers	70	.0	88	21
Metallurgical & Materials Engineers	35	.0	45	10
Mining Engineers, Incl. Mine Safety	8	.0	9	1
Chemical Engineers	37	.0	46	11
Civil Engineers, Incl. Traffic	917	.4	1,171	377
Agricultural Engineers	119	.0	154	43
Electrical & Electronic Engineers	572	.2	768	225
Industrial Engineers, Exc. Safety	141	.0	177	45
Safety Engineers, Exc. Mining	35	.0	44	11
Mechanical Engineers	390	.2	500	131
All Other Engineers	204	.1	256	62
Architects, Exc. Landscape & Marine	867	.3	1,121	370
Landscape Architects	47	.0	60	18
Surveying & Mapping Scientists	276	.1	347	84
Engineering Technicians & Technologists	186	.1	227	56
Civil Engineering Technicians & Technologists	283	.1	362	115
Electrical/Electronic Engineering Technicians	916	.4	1,172	305
Industrial Engineering Techs.	167	.1	212	62
Mechanical Engineering Techs.	92	.0	113	22
Drafters	2,382	1.0	3,070	884
Surveying & Mapping Techs.	740	.3	943	249
All Other Engineering & Related Technicians	169	.1	214	60
Natural Scientists & Related Workers	818	.3	1,010	251
Physical Scientists	18	.0	20	2
Physicists & Astronomers	42	.0	52	12
Chemists, Exc. Biochemists	58	.0	74	21
Geologists, Geophysicists, & Oceanographers	72	.0	90	19
All Other Physical Scientists	82	.0	99	20
Life Scientists	24	.0	27	4
Agricultural & Food Scientists	28	.0	35	11

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Biological Scientists	53	.0	60	9
Medical Scientists	43	.0	47	7
Physical & Life Science Technicians	85	.0	99	21
Biological, Agri., & Food Techs., Exc. Health	55	.0	70	20
Chemical Techs., Exc. Health	108	.0	143	46
All Other Physical & Life Science Techs.	150	.1	194	59
Computer, Math, Operations, Research, & Related	2,056	.8	2,608	630
Systems Analysts, Electronic Data Processing	780	.3	992	239
Computer Programmers	985	.4	1,256	312
Computer Programmer Aides	146	.1	184	44
Operations & Systems Analysts, Exc. Computer	53	.0	67	14
Statisticians	53	.0	59	9
Financial Analysts, Statistical	22	.0	30	8
All Other Mathematical Scientists	11	.0	14	4
Mathematical Technicians	6	.0	6	0
Social Scientists & Other Social & Religious Occupations	4,079	1.6	4,888	1,302
Economists, Incl. Market Research Analysts	69	.0	86	24
Urban & Regional Planners	102	.0	122	23
Psychologists	251	.1	282	44
All Other Social Scientists	99	.1	121	26
Social Workers, Medical & Psychiatric	1,239	.5	1,453	416
Social Workers, Exc. Medical & Psychiatric	820	.3	1,007	319
Social Service Technicians	938	.4	1,133	262
Recreation Workers	405	.2	502	146
Clergy	69	.0	77	14
Directors, Religious Activities & Education	44	.0	53	15
All Other Religious Workers	43	.0	52	13
Law & Related Occupations	3,957	1.6	5,061	1,546
Lawyers	3,027	1.2	3,878	1,189
Legal Assistants & Technicians, Exc. Clerical	45	.0	57	22
Law Clerks	198	.1	253	75
Paralegal Personnel	627	.2	802	240
All Other Legal Assistants/Techs., Exc. Clerical	60	.0	71	20
Teachers, Educators, Librarians, & Related Occupations	5,307	2.1	6,643	2,088
Lecturers	52	.0	66	18
Nursing Instructors	150	.1	171	31
Teachers, Preschool & Kindergarten	2,148	.9	2,737	995
Teachers, Elementary School	53	.0	63	17
Teachers & Instructors, Voc. Ed. & Training	328	.1	401	129
Instructors, Nonvocational Education	328	.1	404	98
Instructors & Coaches, Sports & Physical Training	1,404	.6	1,787	523
All Other Teachers & Instructors	269	.1	326	111
Librarians, Professional	61	.0	67	12
Technical Assistants, Library	16	.0	17	2
Curators, Archivists, & Museum Technicians	57	.0	69	19
Vocational & Educational Counselors	311	.1	384	107
Instructional Coordinators	130	.1	151	26
Health Practitioners, Techs., & Related Occupations	36,403	14.3	42,346	12,607
Physicians & Surgeons	4,103	1.6	4,718	1,214
Dentists	960	.4	1,098	227
Optometrists	219	.1	247	56
Podiatrists	37	.0	41	9
All Other Health Diagnosing/Treating				
Practitioners	74	.0	82	28
Respiratory Therapists	650	.3	745	194
Occupational Therapists	151	.1	168	34
Physical Therapists	505	.2	575	141
Corrective & Manual Arts Therapists	21	.0	22	2
Speech Pathologists & Audiologists	114	.0	128	28

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Recreational Therapists	105	.0	117	25
All Other Therapists	37	.0	41	6
Registered Nurses	14,153	5.6	16,506	5,095
Licensed Practical Nurses	4,964	2.0	5,862	2,000
Emergency Medical Technicians	102	.0	114	33
Physician Assistants	498	.2	563	168
Opticians, Dispensing & Measuring	322	.1	366	86
Pharmacists	434	.2	493	147
Dietitians & Nutritionists	246	.1	275	64
Dietetic Technicians	486	.2	569	176
Medical & Clinical Laboratory Technologists	1,342	.5	1,539	429
Medical & Clinical Laboratory Technicians	966	.4	1,102	262
Dental Hygienists	891	.4	1,022	326
Medical Records Technicians & Technologists	375	.1	422	130
Nuclear Medicine Technologists	191	.1	218	54
Radiologic Technologists	633	.2	721	181
Radiologic Technicians	627	.2	710	170
Electroencephalograph Techs.	52	.0	58	11
Electrocardiograph Techs.	163	.1	184	41
Surgical Technicians	519	.2	593	143
All Other Health Professionals, Paraprofessionals, & Technicians	2,463	1.0	3,047	1,127
Writers, Artists, Athletes, & Related Occupations	2,942	1.2	3,736	1,143
Writers & Editors	180	.1	225	70
Technical Writers	63	.0	81	18
Public Rel. Specialists & Publicity Writers	372	.1	454	123
Reporters & Correspondents	114	.0	152	59
Announcers, Radio & Television	7	.0	7	0
Photographers	293	.1	373	106
Camera Operators, Television & Motion Picture	16	.0	19	3
Artists & Related Workers	448	.2	575	204
Designers, Exc. Interior Designers	408	.2	519	142
Interior Designers	34	.0	43	10
Music Directors, Singers, Composers, & Related	12	.0	12	0
Musicians, Instrumental	544	.2	699	234
Dancers & Choreographers	15	.0	18	7
Producers, Directors, Actors, & Entertainers	241	.1	310	94
Athletes, Coaches, Umpires, & Related Workers	195	.1	249	77
Professional, Paraprofessional, & Technical	1,356	.5	1,660	396
Funeral Directors & Morticians	149	.1	186	47
Embalmers	68	.0	84	21
All Other Professional, Paraprofessional, & Technical Workers	1,139	.4	1,390	328
SALES & RELATED OCCUPATIONS	10,352	4.1	13,116	4,463
First Line Supervisors & Managers/Supervisors	1,125	.4	1,408	419
First Line Supervisors & Managers - Sales	1,125	.4	1,408	419
Sales Occupations, Services	1,608	.6	2,055	698
Sales Agents, Selected Business Services	1,250	.5	1,596	551
Sales Agents, Advertising	79	.0	100	29
All Other Sales Representatives & Salespersons, Service	279	.1	359	118
Merchandise, Products, & Other Sales-Related Occupations	7,619	3.0	9,653	3,346
Sales Engineers	55	.0	68	14
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	286	.1	357	101
Other Sales Representatives, Exc. Retail	504	.2	638	210
Salespersons, Retail	547	.2	666	183
Salespersons, Parts	188	.1	236	67

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Counter & Rental Clerks	2,035	.8	2,664	1,043
Cashiers	2,361	1.0	2,941	1,034
News/Street Vendors, Phone Solicitors, Door- to-Door Sales Workers	321	.1	407	150
Demonstrators, Promoters, & Models	179	.1	232	85
All Other Sales & Related Workers	1,143	.4	1,444	459
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	53,232	21.0	65,434	21,887
First Line Supervisors & Manager/Supervisors	2,109	.8	2,576	705
First Line Supers.-Clerical & Admin. Support	2,109	.8	2,576	705
Industry-Specific Clerical & Administrative Support	3,904	1.5	4,842	1,645
Credit Checkers	65	.1	83	31
Adjustment Clerks	10	.0	12	4
Welfare Eligibility Workers & Interviewers	75	.0	90	24
Investigators, Clerical	260	.1	333	110
Bill & Account Collectors	575	.2	747	258
Travel Clerks	124	.0	150	50
Hotel Desk Clerks	1,817	.7	2,242	812
Library Assistants & Bookmobile Drivers	47	.0	53	7
Teacher Aides & Ed. Assistants, Clerical	914	.4	1,112	345
Proofreaders & Copy Markers	17	.0	20	4
Selected Secretarial & General Office Occupations	36,607	14.4	44,896	15,792
Legal Secretaries	2,539	1.0	3,263	1,329
Medical Secretaries	1,612	.6	1,845	585
Secretaries	7,125	2.8	8,862	3,326
Stenographers	195	.1	234	72
Receptionists & Information Clerks	5,030	2.0	6,086	2,091
Typists	2,042	.8	2,443	895
Typists, Word Processing Equipment	988	.2	1,239	346
Personnel Clerks, Exc. Payroll & Timekeeping	155	.1	172	45
Correspondence Clerks	27	.0	34	12
File Clerks	838	.3	994	361
Order Clerks - Materials, Merch., & Service	255	.1	310	101
Procurement Clerks	82	.0	91	15
Statistical Clerks	341	.1	394	118
Interviewing Clerks, Exc. Personnel & Welfare	1,839	.7	2,280	732
Bookkeeping, Accounting, & Auditing Clerks	5,883	2.3	7,318	2,546
Payroll & Timekeeping Clerks	393	.2	459	106
Billing, Cost & Rate Clerks	1,303	.5	1,499	451
General Office Clerks	5,960	2.4	7,373	2,661
Electronic Data Processing & Other Office Machine Occupations	3,755	1.5	4,647	1,292
Billing, Posting, & Calculating Machine Opers.	283	.1	324	81
Duplicating Machine Operators	128	.1	157	53
Mail Machine Operators, Preparation & Handling	80	.0	99	39
Computer Operators, Exc. Peripheral Equipment	735	.3	906	235
Peripheral EDP Equipment Operators	225	.2	281	105
Data Entry Keyers, Exc. Composing	2,094	.8	2,620	678
Data Keyers, Composing	102	.0	129	51
All Other Office Machine Operators	108	.0	131	50
Communications, Mail, & Message Distributing Occupations	2,352	1.0	2,968	1,149
Switchboard Operators	1,663	.7	2,098	865
Mail Clerks, Exc. Mail Machine Operators & Postal Service	485	.2	614	210
Messengers	204	.1	256	74
Material Distribution & Recording Occupations	2,376	1.0	2,921	794
Dispatchers - Police, Fire, & Ambulance	43	.0	49	10
Dispatchers - Exc. Police, Fire, & Ambulance	113	.0	145	40

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Production, Planning, & Expediting Clerks	189	.1	240	89
Stock Clerks - Stockroom, Warehouse, or Yard	1,418	.6	1,750	479
Traffic, Shipping, & Receiving Clerks	380	.1	461	114
All Other Material Recording/Scheduling/Dist.	233	.1	276	62
All Other Clerical & Administrative Support Occupations	2,129	.8	2,584	510
SERVICE OCCUPATIONS	68,209	26.9	84,229	28,718
First Line Supers. & Mgrs./Supers. - Service	2,538	1.0	3,119	1,014
Housekeepers	949	.4	1,149	332
All Other Service Supervisors & Managers	1,589	.6	1,970	682
Protective Services Occupations	6,230	2.5	8,050	2,262
Detectives & Investigators, Exc. Public	213	.1	264	83
Guards & Watch Guards	5,104	2.0	6,584	1,771
All Other Protective Service Workers	913	.4	1,182	408
Food & Beverage Service Occupations	17,459	6.9	21,430	6,810
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	377	.1	462	161
Bartenders	1,520	.6	1,882	569
Waiters & Waitresses	5,053	2.0	6,305	2,390
Food Servers, Outside	719	.3	858	204
Dining-Room/Cafeteria Attends. & Bartdr. Helpers	2,075	.8	2,563	595
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	700	.3	876	331
Bakers, Bread & Pastry	96	.1	115	34
Butchers & Meat Cutters	19	.0	22	3
Cooks, Restaurant	1,661	.7	2,061	645
Cooks, Institution or Cafeteria	1,076	.4	1,270	332
Cooks, Specialty Fast Food	86	.0	100	19
Cooks, Short Order	149	.1	177	38
Food Preparation Workers	2,851	1.1	3,431	1,075
Combined Food Preparation & Service Workers	113	.0	137	40
All Other Food Service Workers	964	.4	1,171	374
Health Service & Related Occupations	12,590	5.0	14,594	4,738
Dental Assistants	1,796	.8	2,067	760
Medical Assistants	1,856	.7	2,124	681
Nursing Aides, Orderlies, & Attendants	6,649	2.6	7,717	2,539
Home Health Aides	399	.2	494	133
Psychiatric Aides	314	.1	367	119
Physical & Corrective Therapy Assists./Aides	513	.2	588	183
Occupational Therapy Assistants & Aides	248	.1	286	93
Ambulance Drivers & Attendants - Exc.	38	.0	43	9
Emergency Medical Technicians	287	.1	325	99
Pharmacy Assistants	490	.2	583	122
All Other Health Service Workers				
Cleaning and Building Service Occupations, Ex. Private				
Households	16,700	6.6	20,917	7,646
Maids & Housekeeping Cleaners	7,493	3.0	9,101	3,438
Janitors & Cleaners, Exc. Maids & Housekeeping	7,900	3.1	10,119	3,643
Pest Controllers & Assistants	804	.3	1,074	363
All Other Cleaning/Building Service, Exc. Private House	503	.2	623	202
Selected Personal Service Occupations	10,474	4.1	13,337	5,239
Barbers	331	.1	419	139
Hairdressers, Hairstylists, & Cosmetologists	4,858	1.9	6,247	2,715
Manicurists	364	.1	464	196
Shampooers	54	.0	68	27
Amusement & Recreation Attendants	1,486	.6	1,882	605
Guides	50	.0	61	19

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Ushers, Lobby Attendants, & Ticket Takers	515	.2	654	210
Baggage Porters & Bellhops	568	.2	710	181
Wardrobe, Locker, & Dressing Room Attendants	84	.0	106	31
Social Welfare Service Aides	267	.1	330	105
Child Care Workers	1,794	.7	2,281	972
Funeral Attendants	93	.1	115	39
All Other Service Occupations	2,218	.9	2,782	1,009
AGRICULTURAL, FORESTRY, FISHING, & RELATED OCCUPATIONS	2,672	1.1	3,309	1,085
Gardeners & Groundskeepers, Exc. Farm	2,035	.8	2,524	858
Animal Caretakers, Exc. Farm	198	.1	247	83
All Other Agri., Forestry, Fishing, & Related	439	.2	538	144
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	32,240	12.7	40,464	11,189
First Line Supervisors & Manager-Production & Related	1,708	.7	2,101	592
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	956	.4	1,189	347
First Line Managers/Supervisors - Construction Trades & Extraction Workers	246	.1	299	68
First Line Mgrs./Supers. - Production & Opers.	37	.0	47	12
First Line Mgrs./Supers. - Transport. Operatives	85	.0	99	24
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	384	.2	467	141
Inspectors & Related Occupations	1,068	.4	1,386	441
Precision Inspectors, Testers, & Graders	770	.3	990	310
Production Inspectors, Testers, & Graders	154	.1	194	55
All Other Inspectors, Testers, & Related	144	.0	202	76
Mechanics, Installers, & Repairers	10,001	3.9	12,548	3,327
Machinery Maintenance Mechanics	57	.1	66	11
Maintenance Repairers, General Utility	2,776	1.1	3,403	834
Automotive Mechanics	2,614	1.0	3,335	934
Automotive Body & Related Repairers	909	.4	1,160	334
Bus & Truck Mechs., & Diesel Eng. Specialists	370	.1	472	129
Mobile Heavy Equip. Mechanics, Exc. Engines	22	.0	28	6
Small Engine Specialists	78	.0	97	23
All Communication Equipment Mechanics/ Installers/Repairers	2	.0	2	0
Data Processing Equipment Repairers	132	.1	168	42
Electronic Home Entertainment Equip. Repairers	185	.1	234	59
Electric Home Appliance & Power Tool Repairers	197	.1	248	71
Electric Motor, Transformer, & Rel. Repairers	247	.1	318	93
Electronics Repairers, Commercial & Ind. Equip.	71	.0	90	22
All Other Electrical Mechs./Installers/Repairers	279	.1	361	101
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	420	.2	520	134
Precision Instrument Repairers	61	.0	76	19
Electromedical & Biomedical Equip. Repairers	51	.0	56	8
Camera & Photographic Equipment Repairers	18	.0	20	3
Watchmakers	13	.0	15	2
Locksmiths & Safe Repairers	132	.1	170	49
Office Machine & Cash Register Servicers	26	.0	32	7
Coin & Vending Machine Servicers & Repairers	75	.0	93	23
Tire Repairers & Changers	129	.1	164	49
Menders - Garments, Linens, & Related	44	.0	51	10
All Other Mechanics, Installers, & Repairers	1,093	.4	1,369	364
Construction Trades & Extractive Occupations, Ex. Material Moving	1,431	.6	1,739	412
Carpenters	340	.1	404	92
Electricians	260	.1	314	71

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Painters & Paperhangers - Construction & Maintenance	180	.1	216	51
Plumbers, Pipefitters, & Steamfitters	155	.1	185	40
Septic Tank Servicers & Sewer Pipe Cleaners	60	.0	72	18
All Other Construction Trades Workers	25	.0	27	3
All Other Extraction Workers, Exc. Helpers	411	.2	521	137
Precision Production Occupations	1,850	.7	2,270	627
Precision Instrument Makers	44	.0	56	19
Machinists	152	.1	185	43
Tool Grinders, Filers, Sharpeners (Precision)	51	.0	65	19
All Other Precision Metal Workers	16	.1	20	5
Furniture Finishers	11	.0	13	2
All Other Precision Woodworkers	21	.0	25	5
Custom Tailors & Sewers	89	.1	108	31
Upholsterers	337	.0	431	143
Spotters, Dry Cleaning	79	.0	100	33
Pressers, Delicate Fabrics	165	.1	209	64
All Other Precision Textile & Apparel Workers	32	.0	40	11
All Precision Printing Workers	6	.0	7	1
Precision Photographic Process Workers	81	.0	100	28
Precision Dental Laboratory Technicians	421	.2	483	114
All Other Precision Workers	345	.1	428	109
Machine Setters, Operatives, & Tenders	4,594	1.8	5,772	1,650
Machine Forming Operators & Tenders - Metal & Plastic	49	.0	62	18
Offset Litho. Press Setters & Set-Up Oper.	53	.0	66	20
Printing Press Machine Operators & Tenders	121	.0	158	48
Photoengraving & Lithographing Machine Oper.	127	.1	161	48
Bindery Machine Operators	44	.0	55	15
Sewing Machine Operators, Garment	52	.0	67	21
Sewing Machine Operators, Non-Garment	45	.0	56	15
Laundry/Drycleaning Mach. Oper., Exc. Pressing	1,958	.8	2,431	651
Pressing Machine Oper. - Textile & Garments	432	.2	549	173
Motion Picture Projectionists	139	.1	172	60
Photographic Processing Mach. Oper. & Tenders	475	.2	607	186
Boiler Operators & Tenders, Low Pressure	11	.0	11	0
Painters, Transportation Equipment	156	.1	200	61
Packaging & Filling Machine Oper. & Tenders	52	.0	65	18
All Other Machine Setters, Operatives, & Tenders	880	.1	1,112	316
Hand Working Occupations, Inc. Assemblers & Fabricators	2,024	.8	2,582	761
Welders & Cutters	239	.1	298	75
Pressers, Hand	100	.0	127	37
Sewers, Hand	26	.0	30	5
Painting, Coating, & Decorating Workers, Hand	122	.0	156	43
Engraving & Printing Workers, Hand	51	.0	64	15
All Other Hand Workers	1,486	.6	1,907	586
Plant & System Occupations	125	.0	144	30
Stationary Engineers	90	.0	102	21
All Other Plant & System Operators	35	.0	42	9
Transportation & Material Moving Machine & Vehicle Operators	3,674	1.4	4,591	1,164
Truck Drivers, Light - Incl. Delivery & Route	1,678	.6	2,115	543
Bus Drivers	176	.1	206	46
Bus Drivers, School	127	.1	155	39
Taxi Drivers & Chauffeurs	96	.0	111	25
Driving Sales Workers	285	.1	368	98
All Other Motor Vehicle Operators	299	.1	357	71
Service Station Attendants	228	.1	290	86
Parking Lot Attendants	140	.1	175	44

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

ARIZONA (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
All Other Transportation & Related Workers	50	.0	61	13
Industrial Truck & Tractor Operators	183	.1	232	62
All Other Transportation & Moving Equip. Operators	406	.2	514	136
All Other Material Moving Equipment Operators	6	.0	7	1
Helpers, Laborers, & Material Movers, Hand	5,765	2.3	7,331	2,185
Mechanic & Repairer Helpers	239	.1	301	83
Machine Feeders & Offbearers	81	.0	103	29
Freight, Stock, & Material Movers, Hand	590	.2	739	203
Hand Packers & Packagers	178	.1	240	79
Vehicle Washers & Equipment Cleaners	1,369	.5	1,760	548
All Other Helpers & Laborers	3,308	1.3	4,188	1,243
TOTAL ALL OCCUPATIONS	253,706	100.0	312,016	97,932

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Compliance & Enforce. Inspectors, Exc. Const.

All Other Engineers
Nuclear Engineers

All Other Physical & Life Science Techs.
Nuclear Technicians & Technologists

All Other Mathematical Scientists
Actuaries

All Other Professional, Paraprofessional,
& Technical Workers
Broadcast Technicians
Film Editors

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Advertising Clerks

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Machinery Maintenance Mechanics
Machinery Maintenance Mechs., Marine Equip.

All Other Precision Metal Workers
Precision Hand Workers, Jewelry & Related
Boilermakers

All Other Precision Woodworkers
Cabinetmakers & Bench Carpenters

All Other Precision Textile & Apparel Workers
Shoe & Leather Workers & Repairers - Precision
Precision Dyers

All Precision Printing Workers
Precision Compositors/Typesetters/Arrangers

All Other Precision Workers
Medical Appliance Makers

All Other Machine Setters, Set-Up Operators,
Operators, & Tenders
Furnace, Kiln, Oven, Drier, or Kettle Opers.
Coating & Painting Machine Set-Up Operators
Coating, Painting, & Spraying Machine Opers.

All Other Hand Workers
Solderers & Brazers

All Other Transportation & Related Workers
Aircraft Pilots & Flight Engineers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

APACHE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	149	168	19	12	31
Financial Managers	11	12	1	0	1
Administrative Services Managers	12	13	1	0	1
Medicine & Health Services Managers	11	11	0	0	0
Food Service & Lodging Managers	8	9	1	1	2
General Managers & Top Executives	24	27	3	1	4
All Other Managers & Administrators	83	96	13	10	23
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1,709	1,987	278	203	481
Accountants & Auditors	86	101	15	12	27
Budget Analysts	17	20	3	2	5
All Other Financial Specialists	1	1	0	0	0
All Other Management Support Workers	433	514	81	60	141
All Engineers	10	11	1	0	1
All Engineering & Related Technicians	61	71	10	5	15
All Physical Scientists	13	15	2	0	2
All Life Scientists	17	20	3	1	4
All Physical & Life Science Techs.	63	74	11	6	17
Computer Programmers	11	13	2	0	2
Computer Programmer Aides	5	5	0	0	0
Statisticians	24	28	4	3	7
All Other Mathematical Scientists	3	3	0	0	0
Urban & Regional Planners	39	46	7	2	9
All Other Social Scientists	25	28	3	1	4
Social Workers, Medical & Psychiatric	34	38	4	4	8
Social Workers, Exc. Medical & Psychiatric	103	121	18	18	36
Social Service Technicians	61	70	9	4	13
Recreation Workers	8	9	1	1	2
All Religious Workers	6	6	0	0	0
Lawyers	81	95	14	8	22
Paralegal Personnel	17	20	3	1	4
All Other Legal Assistants/Techs., Exc. Clerical	15	17	2	3	5
Teachers, Preschool & Kindergarten	76	90	14	14	28
Teachers, Elementary School	8	9	1	1	2
Instructors, Nonvocational Education	15	17	2	0	2
All Other Teachers & Instructors	8	9	1	1	2
Vocational & Educational Counselors	31	36	5	3	8
Physicians & Surgeons	8	8	0	0	0
Registered Nurses	51	57	6	7	13
Licensed Practical Nurses	19	20	1	2	3
Emergency Medical Technicians	5	5	0	1	1
Dietetic Technicians	99	116	17	20	37
Medical & Clinical Laboratory Technologists	8	9	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	72	80	8	10	18
Writers & Editors	8	9	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	168	196	28	11	39
SALES & RELATED OCCUPATIONS	46	56	10	6	16
Cashiers	30	39	9	5	14
All Other Sales & Related Workers	16	17	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	882	1,027	145	156	301
First Line Supers.-Clerical & Admin. Support	22	24	2	1	3
Hotel Desk Clerks	31	36	5	6	11
Teacher Aides & Ed. Assistants, Clerical	147	173	26	26	52
Medical Secretaries	5	5	0	1	1
All Other Secretaries	264	313	49	59	108
Stenographers	21	24	3	4	7
Receptionists & Information Clerks	9	9	0	0	0
Typists	83	98	15	21	36
File Clerks	39	46	7	11	18

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

APACHE COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Bookkeeping, Accounting, & Auditing Clerks	85	98	13	14	27
General Office Clerks	32	37	5	5	10
Duplicating Machine Operators	12	14	2	2	4
Computer Operators, Exc. Peripheral Equipment	5	5	0	0	0
Data Entry Keyers, Exc. Composing	15	17	2	1	3
All Communication Equipment Operators	11	12	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	34	40	6	3	9
All Other Material Recording/Scheduling/Dist.	1	1	0	0	0
All Other Clerical & Administrative Support	66	75	9	1	10
SERVICE OCCUPATIONS	654	747	93	110	203
Housekeepers	5	5	0	0	0
All Service Supervisors & Managers	60	70	10	12	22
Guards & Watch Guards	7	8	1	0	1
Bartenders	6	6	0	0	0
Waiters & Waitresses	47	54	7	9	16
Cooks, Restaurant	23	26	3	3	6
Cooks, Institution or Cafeteria	37	42	5	4	9
Food Preparation Workers	33	37	4	4	8
All Other Food Service Workers	29	32	3	1	4
Nursing Aides, Orderlies, & Attendants	65	74	9	13	22
All Other Health Service Workers	30	31	1	3	4
Maids & Housekeeping Cleaners	71	82	11	17	28
Janitors & Cleaners, Exc. Maids & Housekeeping	42	47	5	5	10
Child Care Workers	23	26	3	5	8
All Other Service Workers	176	207	31	34	65
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	25	28	3	2	5
Gardeners & Groundskeepers, Exc. Farm	13	14	1	1	2
All Other Agrl., Forestry, Fishing, & Related	12	14	2	1	3
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	300	350	50	19	69
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	5	5	0	0	0
All First Line Managers/Supervisors - Maintenance/Production/Construction	13	16	3	1	4
All Inspectors, Testers, & Related	12	19	7	1	8
All Machinery Maintenance Mechanics	3	3	0	0	0
Maintenance Repairers, General Utility	55	76	11	4	15
All Electrical Mechs./Installers/Repairers	2	3	1	0	1
All Other Mechanics, Installers, & Repairers	49	57	8	4	12
Electricians	7	8	1	0	1
All Other Construction Trades Workers	21	22	1	1	2
All Precision Metal Workers	1	1	0	0	0
All Machine Operators & Tenders	31	36	5	2	7
Hand Working Occupations, Inc. Assemblers & Fabricators	5	5	0	0	0
Bus Drivers	30	35	5	3	8
All Other Motor Vehicle Operators	3	3	0	0	0
All Transportation & Moving Equip. Operators	20	23	3	1	4
All Freight & Material Movers, Hand	14	16	2	1	3
All Helpers & Laborers	19	22	3	1	4
TOTAL ALL OCCUPATIONS	3,765	4,363	598	508	1,106

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

APACHE COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Purchasing Agents, Exc. Wholesale, Retail,
& Farm
Personnel, Training, & Labor Rel. Specialists
Management Analysts
Compliance & Enforcement Inspectors, Exc. Const.

All Engineering & Related Technicians
Surveying & Mapping Techs.

All Other Teachers & Instructors
Teachers & Instructors, Voc. Ed. & Training

All Other Health Professionals,
Paraprofessionals, & Technicians
Dietitians & Nutritionists

All Other Professional, Paraprofessional,
& Technical Workers
Systems Analysts, Electronic Data Processing
Instructional Coordinators

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
First Line Supervisors & Managers - Sales
Salespersons, Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Secretaries
Legal Secretaries

All Communication Equipment Operators
Switchboard Operators

All Other Clerical & Administrative Support
Personnel Clerks, Exc. Payroll & Timekeeping
Billing, Cost & Rate Clerks

SERVICE OCCUPATIONS

All Other Food Service Workers
Dining Room/Cafeteria Attends. & Bartdr. Helpers
Counter Attendants - Lunchroom, Coffee Shop,
& Cafeteria

All Other Health Service Workers
Medical Assistants

All Other Service Workers
Hairdressers, Hairstylists, & Cosmetologists
Ushers, Lobby Attendants, & Ticket Takers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All First Line Managers/Supervisors -
Maintenance/Production/Construction
First Line Managers/Supervisors - Construction
Trades & Extraction Workers

All Inspectors, Testers, & Related
Precision Inspectors, Testers, & Graders

All Other Mechanics, Installers, & Repairers
Automotive Mechanics

All Other Construction Trades Workers
Carpenters
Plumbers, Pipefitters, & Steamfitters

All Machine Operators & Tenders
Laundry/Drycleaning Mach. Opers., Exc. Pressing

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCHISE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	140	165	25	7	32
Financial Managers	34	36	2	1	3
Medicine & Health Services Managers	16	18	2	1	3
General Managers & Top Executives	58	71	13	3	16
All Other Managers & Administrators	32	40	8	2	10
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	716	870	154	78	232
Accountants & Auditors	19	21	2	2	4
All Other Financial Specialists	19	21	2	2	4
All Other Management Support Workers	9	9	0	0	0
All Engineers	95	156	61	5	66
Electrical/Electronic Engineering Technicians	19	26	7	0	7
All Other Engineering & Related Technicians	12	13	1	0	1
All Life Scientists	1	1	0	0	0
Computer Programmers	5	7	2	0	2
Computer, Math, Operations, Research, & Related	14	22	8	0	8
Lawyers	18	21	3	2	5
All Legal Assistants/Techs., Exc. Clerical	11	13	2	1	3
Instructors & Coaches, Sports & Physical Trng.	6	7	1	0	1
All Other Teachers & Instructors	19	20	1	2	3
Physicians & Surgeons	43	48	5	5	10
Dentists	16	18	2	1	3
All Other Health Diagnosing/Treating					
Practitioners	9	10	1	1	2
Physical Therapists	5	5	0	0	0
All Other Therapists	5	5	0	0	0
Registered Nurses	159	183	24	29	53
Licensed Practical Nurses	53	61	8	11	19
Physician Assistants	6	6	0	1	1
Pharmacists	9	10	1	1	2
Medical & Clinical Laboratory Technologists	25	28	3	3	6
Medical & Clinical Laboratory Technicians	16	16	0	0	0
Dental Hygienists	15	17	2	2	4
Medical Records Technicians & Technologists	12	13	1	3	4
Radiologic Technicians	13	14	1	1	2
Surgical Technicians	9	10	1	1	2
All Other Health Professionals,					
Paraprofessionals, & Technicians	19	20	1	2	3
Funeral Directors & Morticians	10	11	1	0	1
All Other Professional, Paraprofessional,					
& Technical Workers	45	58	13	3	16
SALES & RELATED OCCUPATIONS	82	108	26	10	36
Cashiers	16	17	1	1	2
All Other Sales & Related Workers	66	91	25	9	34
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	440	510	70	57	127
First Line Supers.-Clerical & Admin. Support	7	8	1	0	1
Hotel Desk Clerks	28	33	5	6	11
Medical Secretaries	51	58	7	10	17
All Other Secretaries	74	90	16	12	28
Receptionists & Information Clerks	72	78	6	10	16
Typists	25	28	3	4	7
Interviewing Clerks, Exc. Personnel & Welfare	18	20	2	2	4
Bookkeeping, Accounting, & Auditing Clerks	42	49	7	3	10
Billing, Cost & Rate Clerks	27	30	3	5	8
General Office Clerks	34	39	5	4	9
Computer Operators, Exc. Peripheral Equipment	14	17	3	0	3
Data Entry Keyers, Exc. Composing	11	15	4	0	4
All Other Office Machine Operators	1	1	0	0	0

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCHISE COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Communication Equipment Operators	3	3	0	0	0
All Material Recording/Scheduling/Dist.	7	7	0	0	0
All Other Clerical & Administrative Support	26	34	8	1	9
SERVICE OCCUPATIONS	722	833	111	124	235
All Service Supervisors & Managers	23	25	2	1	3
All Protective Service Workers	3	3	0	0	0
Bartenders	74	86	12	9	21
Waiters & Waitresses	87	101	14	18	32
Dining Room/Cafeteria Attendants & Bartender Helpers	25	29	4	1	5
Cooks, Restaurant	18	21	3	1	4
Cooks, Institution or Cafeteria	30	32	2	2	4
Food Preparation Workers	56	63	7	8	15
All Other Food Service Workers	3	3	0	0	0
Dental Assistants	41	47	6	10	16
Medical Assistants	9	9	0	1	1
Nursing Aides, Orderlies, & Attendants	120	139	19	26	45
Physical & Corrective Therapy Assistants/Aides	6	6	0	1	1
Pharmacy Assistants	5	5	0	1	1
All Other Health Service Workers	1	1	0	0	0
Maids & Housekeeping Cleaners	76	88	12	17	29
Janitors & Cleaners, Exc. Maids & Housekeeping	55	71	16	6	22
Hairdressers, Hairstylists, & Cosmetologists	58	68	10	15	25
Funeral Attendants	6	7	1	1	2
All Other Service Workers	26	29	3	6	9
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	55	70	15	5	20
Gardeners & Groundskeepers, Exc. Farm	36	39	3	3	6
All Other Agri., Forestry, Fishing, & Related	19	31	12	2	14
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	197	239	42	9	51
All First Line Managers/Supervisors - Maintenance/Production/Construction	10	10	0	0	0
All Machinery Maintenance Mechanics	2	2	0	0	0
Maintenance Repairers, General Utility	38	52	14	1	15
Automotive Mechanics	45	52	7	3	10
All Electrical Mechs./Installers/Repairers	7	8	1	0	1
All Other Mechanics, Installers, & Repairers	4	4	0	0	0
All Precision Textile & Apparel Workers	4	4	0	0	0
All Other Precision Workers	2	2	0	0	0
All Machine Operators & Tenders	14	16	2	0	2
All Motor Vehicle Operators	11	11	0	0	0
All Other Transportation & Related Workers	3	3	0	0	0
All Helpers & Laborers	57	75	18	5	23
TOTAL ALL OCCUPATIONS	2,352	2,795	443	290	733

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Tax Preparers

All Other Engineering & Related Technicians
Surveying & Mapping Scientists

All Engineers
Electrical & Electronic Engineers

All Legal Assistants/Techs., Exc. Clerical
Paralegal Personnel

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCHISE COUNTY (CONTD.)

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Other Teachers & Instructors
Teachers, Preschool & Kindergarten
Teachers & Instructors, Voc. Ed. & Training

All Other Health Diagnosing/Treating
Practitioners
Optometrists

All Other Health Professionals,
Paraprofessionals, & Technicians
Opticians, Dispensing & Measuring

All Other Professional, Paraprofessional,
& Technical Workers
Social Service Technicians
Vocational & Educational Counselors
Writers & Editors
Artists & Related Workers

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
First Line Supervisors & Managers - Sales
Salespersons, Parts
Counter & Rental Clerks

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Secretaries
Legal Secretaries

All Other Clerical & Administrative Support
Typists, Word Processing Equipment

SERVICE OCCUPATIONS

All Service Supervisors & Managers
Housekeepers

All Other Service Workers
Child Care Workers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Electrical Mechs./Installers/Repairers
Electric Motor, Transformer, & Rel. Repairers

All Machine Operators & Tenders
Laundry/Drycleaning Mach. Opers., Exc. Pressing
Pressing Machine Opers. - Textile & Garments

All Motor Vehicle Operators
Truck Drivers, Light - Incl. Delivery & Route

All Helpers & Laborers
Vehicle Washers & Equipment Cleaners

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCONINO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	442	503	61	38	99
Financial Managers	50	54	4	2	6
Personnel, Training, & Labor Relations Mgrs.	14	15	1	1	2
Purchasing Managers	5	5	0	0	0
Marketing, Advertising, & Public Rel. Mgrs.	14	16	2	1	3
Administrative Services Managers	16	17	1	1	2
Education Administrators	6	6	0	0	0
Medicine & Health Services Managers	10	10	0	0	0
Food Service & Lodging Managers	104	121	17	13	30
General Managers & Top Executives	147	173	26	12	38
All Other Managers & Administrators	76	86	10	8	18
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1,376	1,575	199	172	371
Accountants & Auditors	74	85	11	9	20
All Other Financial Specialists	4	4	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	6	6	0	0	0
Personnel, Training, & Labor Rel. Specialists	7	8	1	0	1
All Other Management Support Workers	80	93	13	10	23
All Engineers	20	22	2	1	3
All Engineering & Related Technicians	16	18	2	0	2
All Physical Scientists	18	19	1	0	1
All Life Scientists	2	2	0	0	0
All Other Physical & Life Science Techs.	6	6	0	0	0
All Mathematical Scientists	17	22	5	0	5
All Social Scientists	23	26	3	1	4
Social Workers, Exc. Medical & Psychiatric	62	71	9	9	18
Social Service Technicians	58	66	8	3	11
All Religious Workers	7	8	1	1	2
Lawyers	32	37	5	3	8
Teachers, Preschool & Kindergarten	97	114	17	17	34
Instructors, Nonvocational Education	8	8	0	0	0
Instructors & Coaches, Sports & Physical Trng.	79	92	13	8	21
All Teachers & Instructors	26	29	3	4	7
Physicians & Surgeons	48	53	5	5	10
Dentists	24	27	3	2	5
All Other Health Diagnosing/Treating Practitioners	17	19	2	4	6
Registered Nurses	239	279	40	43	83
Licensed Practical Nurses	27	36	9	5	14
Pharmacists	6	6	0	1	1
Dietetic Technicians	73	86	13	15	28
Medical & Clinical Laboratory Technologists	15	17	2	2	4
Medical & Clinical Laboratory Technicians	5	5	0	0	0
Dental Hygienists	24	27	3	5	8
Surgical Technicians	5	5	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	91	102	11	13	24
All Other Professional, Paraprofessional, & Technical Workers	160	177	17	11	28
SALES & RELATED OCCUPATIONS	544	639	95	80	175
First Line Supervisors & Managers - Sales	52	60	8	6	14
Sales Agents, Selected Business Services	19	23	4	2	6
All Other Sales Representatives & Salespersons, Service	2	2	0	0	0
Salespersons, Retail	175	206	31	22	53
Salespersons, Parts	16	18	2	1	3
Counter & Rental Clerks	53	66	13	9	22
Cashiers	199	233	34	37	71
All Other Sales & Related Workers	28	31	3	3	6

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCONINO COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	1,180	1,347	167	184	351
First Line Supers.-Clerical & Admin. Support	41	46	5	4	9
Travel Clerks	43	49	6	8	14
Hotel Desk Clerks	261	309	48	55	103
Teacher Aides & Ed. Assistants, Clerical	114	134	20	19	39
Legal Secretaries	48	56	8	11	19
Medical Secretaries	33	37	4	6	10
All Other Secretaries	131	148	17	20	37
Receptionists & Information Clerks	73	79	6	8	14
Typists	59	66	7	12	19
Bookkeeping, Accounting, & Auditing Clerks	127	146	19	18	37
Payroll & Timekeeping Clerks	9	9	0	0	0
Billing, Cost & Rate Clerks	22	23	1	3	4
General Office Clerks	71	82	11	10	21
Billing, Posting, & Calculating Machine Opers.	6	6	0	0	0
Data Entry Keyers, Exc. Composing	15	16	1	0	1
All Other Office Machine Operators	4	4	0	0	0
Switchboard Operators	26	30	4	6	10
Stock Clerks - Stockroom, Warehouse, or Yard	19	21	2	1	3
All Other Material Recording/Scheduling/Dist.	23	26	3	1	4
All Other Clerical & Administrative Support	55	60	5	2	7
SERVICE OCCUPATIONS	3,082	3,671	589	552	1,141
Housekeepers	47	55	8	7	15
All Other Service Supervisors & Managers	65	78	13	12	25
Guards & Watch Guards	98	147	49	5	54
All Other Protective Service Workers	38	59	21	2	23
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	42	49	7	9	16
Bartenders	108	126	18	14	32
Waiters & Waitresses	486	575	89	108	197
Dining Room/Cafeteria Attends. & Bartdr. Helpers	195	231	36	11	47
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	65	76	11	14	25
Bakers, Bread & Pastry	18	21	3	3	6
Cooks, Restaurant	179	211	32	27	59
Cooks, Institution or Cafeteria	36	40	4	4	8
Cooks, Short Order	26	28	2	0	2
Food Preparation Workers	239	280	41	42	83
Combined Food Preparation & Service Workers	24	28	4	4	8
All Other Food Service Workers	58	67	9	8	17
Dental Assistants	40	46	6	11	17
Medical Assistants	29	32	3	5	8
Nursing Aides, Orderlies, & Attendants	72	83	11	15	26
All Other Health Service Workers	42	49	7	9	16
Maids & Housekeeping Cleaners	546	763	117	158	275
Janitors & Cleaners, Exc. Maids & Housekeeping	206	249	43	33	76
All Other Cleaning/Building Service, Exc. Private House	45	56	11	7	18
Hairdressers, Hairstylists, & Cosmetologists	43	50	7	11	18
Amusement & Recreation Attendants	70	82	12	9	21
Baggage Porters & Bellhops	44	52	8	3	11
All Other Service Workers	121	138	17	21	38
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	61	68	7	8	15
Gardeners & Groundskeepers, Exc. Farm	53	60	7	8	15
All Other Agrl., Forestry, Fishing, & Related	8	8	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	946	1,093	147	61	208
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	23	25	2	2	4
First Line Managers/Supervisors - Construction Trades & Extraction Workers	12	13	1	0	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCONINO COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	21	24	3	2	5
All Inspectors, Testers, & Related	4	4	0	0	0
All Machinery Maintenance Mechanics	1	1	0	0	0
Maintenance Repairers, General Utility	142	166	24	10	34
Automotive Mechanics	80	93	13	5	18
All Communication Equipment Mechanics/ Installers/Repairers	1	1	0	0	0
All Other Electrical Mechs./Installers/Repairers	5	5	0	0	0
All Other Mechanics, Installers, & Repairers	103	119	16	6	22
Carpenters	11	11	0	0	0
Electricians	11	12	1	0	1
Painters & Paperhangers - Construction & Maintenance	21	24	3	2	5
Plumbers, Pipefitters, & Steamfitters	6	6	0	0	0
All Extraction Workers, Exc. Helpers	21	24	3	2	5
All Precision Metal Workers	7	7	0	0	0
All Precision Textile & Apparel Workers	15	17	2	0	2
All Other Precision Workers	9	11	2	0	2
All Printing & Related Machine Opers.	9	14	5	1	6
Laundry/Drycleaning Mach. Opers., Exc. Pressing	91	106	15	7	22
All Machine Setters & Set-Up Operators	4	6	2	0	2
All Other Machine Operators & Tenders	25	28	3	2	5
Welders & Cutters	21	25	4	1	5
All Other Hand Workers	12	15	3	0	3
All Plant & System Operators	2	2	0	0	0
Truck Drivers, Light - Incl. Delivery & Route	19	21	2	0	2
Bus Drivers	52	59	7	5	12
Taxi Drivers & Chauffeurs	31	36	5	4	9
All Other Motor Vehicle Operators	15	17	2	0	2
All Transportation & Related Workers	11	13	2	1	3
All Other Transportation & Moving Equip. Operators	34	39	5	2	7
All Material Moving Equipment Operators	6	7	1	0	1
Freight, Stock, & Material Movers, Hand	22	24	2	0	2
All Helpers & Laborers	99	118	19	9	28
TOTAL ALL OCCUPATIONS	7,631	8,896	1,265	1,095	2,360

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers Civil Engineers, Incl. Traffic	All Other Health Diagnosing/Treating Practitioners Optometrists
All Engineering & Related Technicians Surveying & Mapping Scientists Engineering & Related Technicians & Technologists	All Other Health Professionals, Paraprofessionals, & Technicians Opticians, Dispensing & Measuring Radiologic Technologists
All Physical Scientists Physicists & Astronomers	All Other Professional, Paraprofessional, & Technical Workers Computer Programmers Social Workers, Medical & Psychiatric Recreation Workers Curators, Archivists, & Museum Technicians Vocational & Educational Counselors Instructional Coordinators Camera Operators, Television & Motion Picture
All Mathematical Scientists Statisticians Financial Analysts, Statistical	
All Religious Workers Clergy	
All Teachers & Instructors Teachers, Elementary School	

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

COCONINO COUNTY (CONTD.)

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
Sales Representatives, Scientific & Related
Products & Services, Exc. Retail

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Material Recording/Scheduling/Dist.
Traffic, Shipping, & Receiving Clerks

All Other Clerical & Administrative Support
File Clerks

SERVICE OCCUPATIONS

All Other Protective Service Workers
Detectives & Investigators, Exc. Public

All Other Food Service Workers
Food Servers, Outside

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

All Other Service Workers
Manicurists
Guides
Ushers, Lobby Attendants, & Ticket Takers
Social Welfare Service Aides
Child Care Workers
Funeral Attendants

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors -
Maintenance/Production/Construction
First Line Mgrs./Supers. - Transport. Operatives

All Other Electrical Mechs./Installers/Repairers
Electronic Home Entertainment Equip. Repairers

All Other Mechanics, Installers, & Repairers
Automotive Body & Related Repairers
Bus & Truck Mechs., & Diesel Eng. Specialists
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers

All Extraction Workers, Exc. Helpers
Septic Tank Servicers & Sewer Pipe Cleaners

All Precision Metal Workers
Machinists

All Precision Textile & Apparel Workers
Upholsterers
Pressers, Delicate Fabrics

All Other Precision Workers
Precision Dental Laboratory Technicians

All Printing & Related Machine Oper.
Printing Press Machine Operators & Tenders

All Other Machine Operators & Tenders
/ Pressing Machine Oper. - Textile & Garments
Motion Picture Projectionists
Photographic Processing Mach. Oper. & Tenders

All Other Motor Vehicle Operators
Bus Drivers
Bus Drivers, School

All Transportation & Related Workers
Service Station Attendants

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

GILA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	112	123	11	6	17
Financial Managers	22	23	1	0	1
Medicine & Health Services Managers	15	16	1	0	1
Food Service & Lodging Managers	13	15	2	1	3
General Managers & Top Executives	27	29	2	1	3
All Other Managers & Administrators	35	40	5	4	9
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	435	483	48	49	97
Accountants & Auditors	13	14	1	1	2
Compliance & Enforcement Inspectors, Exc. Const.	14	16	2	1	3
All Other Management Support Workers	16	17	1	1	2
All Engineers	4	4	0	0	0
All Engineering & Related Technicians	14	15	1	0	1
All Social Scientists	1	1	0	0	0
Social Service Technicians	37	42	5	2	7
All Legal Assistants/Techs., Exc. Clerical	3	3	0	0	0
Teachers, Preschool & Kindergarten	8	8	0	0	0
All Other Teachers & Instructors	7	7	0	0	0
Physicians & Surgeons	22	24	2	2	4
All Other Health Diagnosing/Treating Practitioners	6	6	0	0	0
Respiratory Therapists	8	9	1	1	2
All Other Therapists	4	4	0	0	0
Registered Nurses	114	131	17	21	38
Licensed Practical Nurses	59	68	9	11	20
Pharmacists	7	8	1	1	2
Dietetic Technicians	16	18	2	3	5
Medical & Clinical Laboratory Technologists	10	11	1	1	2
Medical & Clinical Laboratory Technicians	8	9	1	1	2
Radiologic Technicians	5	5	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	18	18	0	1	1
All Other Professional, Paraprofessional, & Technical Workers	41	45	4	2	6
SALES & RELATED OCCUPATIONS	39	43	4	3	7
First Line Supervisors & Managers - Sales	6	7	1	0	1
Cashiers	27	30	3	3	6
All Other Sales & Related Workers	6	6	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	375	420	45	55	100
Welfare Eligibility Workers & Interviewers	5	5	0	0	0
Hotel Desk Clerks	35	41	6	7	13
Teacher Aides & Ed. Assistants, Clerical	13	15	2	2	4
Medical Secretaries	10	11	1	1	2
All Other Secretaries	62	72	10	11	21
Receptionists & Information Clerks	32	34	2	4	6
Typists	62	72	10	16	26
File Clerks	8	9	1	1	2
Interviewing Clerks, Exc. Personnel & Welfare	6	6	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	39	43	4	5	9
Billing, Cost & Rate Clerks	9	10	1	1	2
General Office Clerks	45	52	7	6	13
Computer Operators, Exc. Peripheral Equipment	6	6	0	0	0
All Other Office Machine Operators	5	5	0	0	0
Switchboard Operators	7	7	0	1	1
All Material Recording/Scheduling/Dist.	9	9	0	0	0
All Other Clerical & Administrative Support	22	23	1	0	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

GILA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
SERVICE OCCUPATIONS	622	711	89	107	196
Housekeepers	12	13	1	1	2
All Other Service Supervisors & Managers	5	5	0	0	0
All Protective Service Workers	2	2	0	0	0
Bartenders	22	24	2	2	4
Waiters & Waitresses	74	86	12	16	28
Dining Room/Cafeteria Attends. & Bartdr. Helpers	15	17	2	0	2
Cooks, Restaurant	34	39	5	4	9
Cooks, Institution or Cafeteria	31	35	4	4	8
Food Preparation Workers	52	59	7	8	15
All Other Food Service Workers	18	18	0	0	0
Nursing Aides, Orderlies, & Attendants	92	107	15	20	35
Physical & Corrective Therapy Assists./Aides	6	6	0	1	1
All Other Health Service Workers	19	20	1	3	4
Maids & Housekeeping Cleaners	124	145	21	30	51
Janitors & Cleaners, Exc. Maids & Housekeeping	38	45	7	4	11
Hairdressers, Hairstylists, & Cosmetologists	28	33	5	7	12
Social Welfare Service Aides	14	16	2	2	4
All Other Service Workers	36	41	5	5	10
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	121	142	21	14	35
Gardeners & Groundskeepers, Exc. Farm	10	11	1	1	2
All Other Agri., Forestry, Fishing, & Related	111	131	20	13	33
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	215	262	47	14	61
All First Line Managers/Supervisors -					
Maintenance/Production/Construction	8	9	1	0	1
Maintenance Repairers, General Utility	53	61	8	3	11
All Other Mechanics, Installers, & Repairers	11	12	1	0	1
All Construction Trades Workers	8	9	0	0	0
All Precision Workers	2	2	0	0	0
Pressing Machine Opers. - Textile & Garments	11	12	1	1	2
All Other Machine Operators & Tenders	27	38	11	2	13
All Motor Vehicle Operators	13	13	0	0	0
All Transportation & Moving Equip. Operators	26	42	16	2	18
All Helpers & Laborers	56	65	9	6	15
TOTAL ALL OCCUPATIONS	1,919	2,184	265	248	513

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineering & Related Technicians
Surveying & Mapping Techs.

All Other Teachers & Instructors
Instructors & Coaches, Sports & Physical Trng.

All Other Health Diagnosing/Treating
Practitioners
Dentists

All Other Professional, Paraprofessional,
& Technical Workers
Social Workers, Medical & Psychiatric
Social Workers, Exc. Medical & Psychiatric
Lawyers

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Secretaries
Legal Secretaries

SERVICE OCCUPATIONS

All Other Food Service Workers
Cooks, Specialty Fast Food

All Other Health Service Workers
Dental Assistants

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

All Other Agri., Forestry, Fishing, &
Related
Animal Caretakers, Exc. Farm

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

GILA COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Automotive Body & Related Repairers

All Construction Trades Workers
Electricians

All Other Machine Operators & Tenders
Laundry/Drycleaning Mach. Oper., Exc. Pressing

All Other Motor Vehicle Operators
Bus Drivers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

GRAHAM & GREENLEE COUNTIES

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	25	25	0	0	0
General Managers & Top Executives	11	11	0	0	0
All Other Managers & Administrators	14	14	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	165	176	11	15	26
All Financial Specialists	5	5	0	0	0
All Other Management Support Workers	6	6	0	0	0
All Legal Assistants/Techs., Exc. Clerical	3	3	0	0	0
All Teachers & Instructors	9	10	1	0	1
Physicians & Surgeons	12	13	1	1	2
Dentists	8	8	0	0	0
All Therapists	2	2	0	0	0
Registered Nurses	51	58	7	9	16
Licensed Practical Nurses	16	17	1	3	4
Emergency Medical Technicians	5	5	0	1	1
Physician Assistants	6	6	0	1	1
Medical & Clinical Laboratory Technologists	8	8	0	0	0
Dental Hygienists	5	5	0	0	0
Radiologic Technologists	5	5	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	9	9	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	15	16	1	0	1
SALES & RELATED OCCUPATIONS	23	25	2	2	4
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	124	131	7	9	16
Hotel Desk Clerks	12	14	2	2	4
All Secretaries	16	17	1	1	2
Receptionists & Information Clerks	19	19	0	1	1
File Clerks	7	7	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	17	18	1	1	2
General Office Clerks	21	22	1	2	3
All Office Machine Operators	1	1	0	0	0
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	30	32	2	2	4
SERVICE OCCUPATIONS	259	282	23	39	62
All Service Supervisors & Managers	5	5	0	0	0
Bartenders	8	8	0	0	0
Dining Room/Cafeteria Attndts. & Bartdr. Helpers	7	7	0	0	0
Cooks, Institution or Cafeteria	11	11	0	0	0
Food Preparation Workers	16	17	1	2	3
All Other Food Service Workers	19	20	1	2	3
Dental Assistants	15	16	1	3	4
Medical Assistants	11	12	1	2	3
Nursing Aides, Orderlies, & Attendants	65	74	9	14	23
All Other Health Service Workers	11	11	0	0	0
Maids & Housekeeping Cleaners	52	58	6	10	16
Janitors & Cleaners, Exc. Maids & Housekeeping	9	9	0	0	0
Hairdressers, Hairstylists, & Cosmetologists	26	30	4	6	10
All Other Service Workers	4	4	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	3	3	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	76	82	6	2	8
All First Line Managers/Supervisors - Maintenance/Production/Construction	1	1	0	0	0
Maintenance Repairers, General Utility	7	7	0	0	0
All Communication Equipment Mechanics/ Installers/Repairers	1	1	0	0	0
All Other Mechanics, Installers, & Repairers	29	34	5	2	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

GRAHAM & GREENLEE COUNTIES (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Precision Metal Workers	3	3	0	0	0
All Precision Textile & Apparel Workers	6	6	0	0	0
Laundry/Drycleaning Mach. Oper., Exc. Pressing	8	8	0	0	0
All Other Machine Operators & Tenders	4	4	0	0	0
Hand Working, Inc. Assemblers & Fabricators	8	9	1	0	1
All Motor Vehicle Operators	6	6	0	0	0
All Helpers & Laborers	3	3	0	0	0
TOTAL ALL OCCUPATIONS	675	724	49	67	116

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Accountants & Auditors

All Teachers & Instructors
Instructors & Coaches, Sports & Physical Trng.

All Other Professional, Paraprofessional,
& Technical Workers
Lawyers

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Secretaries
Legal Secretaries

All Other Clerical and Administrative Support Workers
First Line Supers.-Clerical & Administrative Support
Welfare Eligibility Workers & Interviewers
Order Clerks - Materials, Merch., & Service

SERVICE OCCUPATIONS

All Other Food Service Workers
Waiters & Waitresses
Cooks, Restaurant

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Automotive Mechanics
Automotive Body & Related Repairers
Precision Instrument Repairers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

LA PAZ COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	35	35	0	0	0
Financial Managers	5	5	0	0	0
Medicine & Health Services Managers	5	5	0	0	0
Food Service & Lodging Managers	9	9	0	0	0
General Managers & Top Executives	9	9	0	0	0
All Other Managers & Administrators	7	7	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	81	89	8	5	13
All Financial Specialists	3	3	0	0	0
All Other Management Support Workers	7	8	1	1	2
Social Workers, Medical & Psychiatric	5	5	0	0	0
Social Service Technicians	8	9	1	0	1
All Legal Assistants/Techs., Exc. Clerical	1	1	0	0	0
Teachers, Preschool & Kindergarten	14	16	2	2	4
All Other Teachers & Instructors	2	2	0	0	0
Instructional Coordinators	6	7	1	0	1
All Health Diagnosing/Treating Practitioners	1	1	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	11	12	1	1	2
All Other Professional, Paraprofessional, & Technical Workers	23	25	2	1	3
SALES & RELATED OCCUPATIONS	13	14	1	1	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	107	119	12	11	23
Hotel Desk Clerks	11	13	2	2	4
Teacher Aides & Ed. Assistants, Clerical	22	26	4	3	7
Secretaries	24	27	3	4	7
Typists	5	5	0	1	1
Typists, Word Processing Equipment	8	9	1	0	1
Bookkeeping, Accounting, & Auditing Clerks	8	9	1	1	2
Data Entry Keyers, Exc. Composing	5	5	0	0	0
All Other Office Machine Operators	1	1	0	0	0
All Communication Equipment Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	2	2	0	0	0
All Other Clerical & Administrative Support	20	21	1	0	1
SERVICE OCCUPATIONS	149	162	13	13	26
All Service Supervisors & Managers	6	7	1	1	2
Guards & Watch Guards	7	7	0	0	0
Bartenders	16	18	2	1	3
Waiters & Waitresses	19	21	2	2	4
Cooks, Restaurant	7	7	0	0	0
Cooks, Institution or Cafeteria	5	5	0	0	0
Food Preparation Workers	8	8	0	0	0
All Other Food Service Workers	4	4	0	0	0
All Health Service Workers	4	4	0	0	0
Maids & Housekeeping Cleaners	18	20	2	4	6
Janitors & Cleaners, Exc. Maids & Housekeeping	7	7	0	0	0
All Other Cleaning/Building Service, Exc. Private House	1	1	0	0	0
Social Welfare Service Aides	5	5	0	0	0
Child Care Workers	7	8	1	1	2
All Other Service Workers	35	40	5	4	9
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	52	60	8	5	13
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	51	53	2	0	2
All First Line Managers/Supervisors - Maintenance/Production/Construction	3	3	0	0	0
Maintenance Repairers, General Utility	17	19	2	0	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

LA PAZ COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Electrical Mechs./Installers/Repairers	4	4	0	0	0
All Other Mechanics, Installers, & Repairers	5	5	0	0	0
All Construction Trades Workers	4	4	0	0	0
All Motor Vehicle Operators	6	6	0	0	0
All Freight & Material Movers, Hand	2	2	0	0	0
All Helpers & Laborers	10	10	0	0	0
TOTAL ALL OCCUPATIONS	488	532	44	35	79

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

SALES & RELATED OCCUPATIONS

Cashiers -

SERVICE OCCUPATIONS

All Other Service Workers
Amusement & Recreation Attendants

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	9,473	11,761	2,288	1,146	3,434
Financial Managers	1,267	1,570	303	137	440
Personnel, Training, & Labor Relations Mgrs.	260	309	49	22	71
Purchasing Managers	98	115	17	7	24
Marketing, Advertising, & Public Rel. Mgrs.	514	637	123	63	186
Administrative Services Managers	571	712	141	59	200
Education Administrators	95	120	25	9	34
Medicine & Health Services Managers	951	1,098	147	110	257
Property & Real Estate Managers & Admin.	16	20	4	2	6
Construction Managers	65	83	18	7	25
Food Service & Lodging Managers	611	753	142	91	233
General Managers & Top Executives	3,700	4,693	993	457	1,450
All Other Managers & Administrators	1,325	1,651	326	182	508
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	48,614	59,160	10,546	7,233	17,779
Credit Analysts	51	65	14	10	24
Tax Preparers	308	396	88	47	135
Accountants & Auditors	2,282	2,903	621	336	957
Budget Analysts	27	30	3	2	5
All Other Financial Specialists	136	165	29	10	39
Purchasing Agents, Exc. Wholesale, Retail, & Farm	225	273	48	21	69
Employment Interviewers	347	442	95	40	135
Personnel, Training, & Labor Rel. Specialists	560	696	136	60	196
Cost Estimators	102	129	27	21	48
Management Analysts	56	71	15	12	27
Compliance & Enforcement Inspectors, Exc. Const.	43	48	5	4	9
All Other Management Support Workers	785	969	184	101	285
Aeronautical and Astronautical Engineers	67	85	18	3	21
Chemical Engineers	24	29	5	1	6
Civil Engineers, Incl. Traffic	684	873	189	94	283
Agricultural Engineers	79	100	21	5	26
Electrical & Electronic Engineers	361	459	98	19	117
Industrial Engineers, Exc. Safety	140	176	36	9	45
Safety Engineers, Exc. Mining	34	43	9	2	11
Mechanical Engineers	333	426	93	19	112
All Other Engineers	205	255	50	10	60
Architects, Exc. Landscape & Marine	627	808	181	84	265
Landscape Architects	25	32	7	3	10
Surveying & Mapping Scientists	225	290	65	13	78
Civil Engineering Technicians & Technologists	201	256	55	26	81
Electrical/Electronic Engineering Technicians	804	1,027	223	46	269
Industrial Engineering Techs.	155	197	42	16	58
Mechanical Engineering Techs.	76	94	18	1	19
Drafters	1,926	2,480	554	162	716
Surveying & Mapping Techs.	441	567	126	29	155
All Other Engineering & Related Technicians	205	255	50	19	69
Chemists, Exc. Biochemists	37	46	9	3	12
Geologists, Geophysicists, & Oceanographers	37	46	9	0	9
All Other Physical Scientists	42	49	7	2	9
Agricultural & Food Scientists	28	35	7	4	11
Biological Scientists	31	35	4	1	5
Medical Scientists	29	32	3	2	5
Biological, Agrl., & Food Techs., Exc. Health	52	66	14	5	19
Chemical Techs., Exc. Health	22	26	4	2	6
All Other Physical & Life Science Techs.	85	108	23	9	32
Systems Analysts, Electronic Data Processing	676	856	180	26	206
Computer Programmers	773	978	205	36	241
Computer Programmer Aides	114	140	26	6	32
Operations & Systems Analysts, Exc. Computer	44	55	11	0	11
Statisticians	17	19	2	0	2
Financial Analysts, Statistical	11	13	2	0	2

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Other Mathematical Scientists	9	11	2	1	3
Economists, Incl. Market Research Analysts	64	81	17	7	24
Urban & Regional Planners	31	38	7	0	7
Psychologists	182	208	26	11	37
All Other Social Scientists	6	6	0	0	0
Social Workers, Medical & Psychiatric	708	836	128	125	253
Social Workers, Exc. Medical & Psychiatric	296	372	76	50	126
Social Service Technicians	419	517	98	34	132
Recreation Workers	275	344	69	37	106
Clergy	29	32	3	3	6
Directors, Religious Activities & Education	39	48	9	6	15
All Other Religious Workers	34	42	8	4	12
Lawyers	2,211	2,851	640	252	892
Legal Assistants & Technicians, Ex. Clerical	45	57	12	10	22
Law Clerks	130	167	37	14	51
Paralegal Personnel	476	614	138	52	190
All Other Legal Assistants/Techs., Exc. Clerical	8	9	1	1	2
Lecturers	51	65	14	4	18
Nursing Instructors	111	128	17	9	26
Teachers, Preschool & Kindergarten	1,314	1,692	378	256	634
Teachers & Instructors, Voc. Ed. & Training	202	250	48	36	84
Instructors, Nonvocational Education	152	191	39	11	50
Instructors & Coaches, Sports & Physical Trng.	771	989	218	81	299
All Other Teachers & Instructors	210	257	47	43	90
Librarians, Professional	35	40	5	5	10
Technical Assistants, Library	8	9	1	1	2
Curators, Archivists, & Museum Technicians	23	29	6	3	9
Vocational & Educational Counselors	146	185	39	18	57
Instructional Coordinators	32	37	5	1	6
Physicians & Surgeons	2,621	3,028	407	391	798
Dentists	645	744	99	63	162
Optometrists	134	154	20	20	40
Podiatrists	34	38	4	5	9
All Other Health Diagnosing/Treating Practitioners	44	50	6	13	19
Respiratory Therapists	436	503	67	69	136
Occupational Therapists	117	131	14	14	28
Physical Therapists	357	410	53	53	106
Corrective & Manual Arts Therapists	19	20	1	1	2
Speech Pathologists & Audiologists	100	113	13	13	26
Recreational Therapists	62	70	8	8	16
All Other Therapists	32	36	4	2	6
Registered Nurses	9,412	11,012	1,600	1,841	3,441
Licensed Practical Nurses	3,377	4,015	638	766	1,404
Emergency Medical Technicians	81	93	12	18	30
Physician Assistants	351	403	52	77	129
Opticians, Dispensing & Measuring	220	253	33	31	64
Pharmacists	253	291	38	55	93
Dietitians & Nutritionists	143	165	22	26	48
Dietetic Technicians	121	140	19	21	40
Medical & Clinical Laboratory Technologists	836	967	131	152	283
Medical & Clinical Laboratory Technicians	728	839	111	102	213
Dental Hygienists	578	667	89	131	220
Medical Records Technicians & Technologists	218	249	31	52	83
Nuclear Medicine Technologists	167	192	25	25	50
Radiologic Technologists	391	451	60	63	123
Radiologic Technicians	438	503	65	68	133
Electroencephalograph Techs.	37	42	5	4	9
Electrocardiograph Techs.	118	134	16	15	31
Surgical Technicians	385	444	59	54	113
All Other Health Professionals, Paraprofessionals, & Technicians	1,585	1,941	356	354	710

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Writers & Editors	94	114	20	13	33
Technical Writers	47	59	12	0	12
Public Rel. Specialists & Publicity Writers	243	296	53	30	83
Photographers	227	286	59	21	80
Artists & Related Workers	406	519	113	73	186
Designers, Exc. Interior Designers	336	428	92	27	119
Interior Designers	34	43	9	1	10
Musicians, Instrumental	410	528	118	62	180
Producers, Directors, Actors, & Entertainers	192	247	55	21	76
Athletes, Coaches, Umpires, & Related Workers	150	192	42	16	58
Funeral Directors & Morticians	81	104	23	7	30
Embalmers	46	59	13	4	17
All Other Professional, Paraprofessional, & Technical Workers	759	939	180	55	235
SALES & RELATED OCCUPATIONS	7,384	9,375	1,991	1,262	3,253
First Line Supervisors & Managers - Sales	799	1,011	212	109	321
Sales Agents, Selected Business Services	1,048	1,332	284	176	460
Sales Agents, Advertising	52	65	13	6	19
All Other Sales Representatives & Salespersons, Service	219	279	60	31	91
Sales Engineers	48	60	12	1	13
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	256	323	67	29	96
Other Sales Representatives, Exc. Retail	432	548	116	68	184
Salespersons, Retail	280	352	72	35	107
Salespersons, Parts	106	136	30	12	42
Counter & Rental Clerks	1,401	1,801	400	291	691
Cashiers	1,465	1,849	384	299	683
News/Street Vendors, Phone Solicitors, Door- to-Door Sales Workers	313	398	85	63	148
Demonstrators, Promoters, & Models	141	180	39	25	64
All Other Sales & Related Workers	824	1,041	217	117	334
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	38,146	47,327	9,181	7,179	16,360
First Line Supers.-Clerical & Admin. Support	1,529	1,882	353	187	540
Credit Managers	61	77	16	13	29
Adjustment Clerks	10	12	2	2	4
Welfare Eligibility Workers & Interviewers	12	15	3	2	5
Investigators, Clerical	254	325	71	37	108
Bill & Account Collectors	497	635	138	75	213
Travel Clerks	48	60	12	10	22
Hotel Desk Clerks	824	1,019	195	179	374
Library Assistants & Bookmobile Drivers	33	38	5	1	6
Teacher Aides & Ed. Assistants, Clerical	229	293	64	38	102
Advertising Clerks	33	42	9	7	16
Proofreaders & Copy Markers	17	20	3	1	4
Legal Secretaries	1,891	2,441	550	455	1,005
Medical Secretaries	1,099	1,269	170	251	421
All Other Secretaries	4,856	6,071	1,215	1,133	2,348
Stenographers	159	192	33	29	62
Receptionists & Information Clerks	3,519	4,303	784	764	1,548
Typists	1,312	1,597	285	334	619
Typists, Word Processing Equipment	782	980	198	82	280
Personnel Clerks, Exc. Payroll & Timekeeping	97	110	13	20	33
Correspondence Clerks	24	30	6	5	11
File Clerks	555	673	118	146	264
Order Clerks - Materials, Merch., & Service	207	256	49	40	89
Procurement Clerks	54	61	7	5	12
Statistical Clerks	227	265	38	46	84
Interviewing Clerks, Exc. Personnel & Welfare	1,381	1,707	326	223	549
Bookkeeping, Accounting, & Auditing Clerks	4,346	5,461	1,115	866	1,981

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Payroll & Timekeeping Clerks	277	333	56	37	93
Billing, Cost & Rate Clerks	910	1,064	154	191	345
General Office Clerks	4,354	5,444	1,090	957	2,047
Billing, Posting, & Calculating Machine Opers.	224	259	35	35	70
Duplicating Machine Operators	104	130	26	22	48
Mail Machine Operators, Preparation & Handling	79	98	19	20	39
Computer Operators, Exc. Peripheral Equipment	609	759	150	61	211
Peripheral EDP Equipment Operators	179	222	43	39	82
Data Entry Keyers, Exc. Composing	1,845	2,329	484	143	627
Data Keyers, Composing	102	129	27	24	51
All Other Office Machine Operators	97	119	22	26	48
Switchboard Operators	1,169	1,455	286	311	597
Mail Clerks, Exc. Mail Machine Operators & Postal Service	471	599	128	81	209
Messengers	180	227	47	20	67
Dispatchers - Police, Fire, & Ambulance	36	41	5	4	9
Dispatchers - Exc. Police, Fire, & Ambulance	106	135	29	8	37
Production, Planning, & Expediting Clerks	164	208	44	34	78
Stock Clerks - Stockroom, Warehouse, or Yard	1,138	1,428	290	126	416
Traffic, Shipping, & Receiving Clerks	316	389	73	31	104
All Other Material Recording/Scheduling/Dist.	193	233	40	18	58
All Other Clerical & Administrative Support	1,537	1,892	355	40	395
SERVICE OCCUPATIONS	44,092	54,607	10,515	8,321	18,836
First Line Supers. & Mgrs./Supers. - Service	217	273	56	40	96
Housekeepers	465	566	101	69	170
All Other Service Supervisors & Managers	881	1,099	218	180	398
Detectives & Investigators, Exc. Public	178	228	50	10	60
Guards & Watch Guards	4,304	5,483	1,179	254	1,433
All Other Protective Service Workers	856	1,099	243	131	374
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	232	287	55	51	106
Bartenders	753	946	193	112	305
Waiters & Waitresses	2,900	3,617	717	664	1,381
Food Servers, Outside	509	596	87	48	135
Dining Room/Cafeteria Atttdts. & Bartdr. Helpers	1,262	1,567	305	70	375
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	440	557	117	103	220
Bakers, Bread & Pastry	54	65	11	9	20
Butchers & Meat Cutters	8	9	1	0	1
Cooks, Restaurant	865	1,076	211	135	346
Cooks, Institution or Cafeteria	536	647	111	80	191
Cooks, Specialty Fast Food	48	59	11	4	15
Cooks, Short Order	94	114	20	9	29
Food Preparation Workers	1,543	1,871	328	282	610
Combined Food Preparation & Service Workers	63	79	16	10	26
All Other Food Service Workers	714	869	155	129	284
Dental Assistants	1,218	1,408	190	336	526
Medical Assistants	1,288	1,486	198	297	495
Nursing Aides, Orderlies, & Attendants	4,111	4,791	680	917	1,597
Home Health Aides	193	239	46	19	65
Psychiatric Aides	223	257	34	49	83
Physical & Corrective Therapy Assists./Aides	407	474	67	91	158
Occupational Therapy Assistants & Aides	200	231	31	46	77
Ambulance Drivers & Attendants - Exc. Emergency Medical Technicians	27	31	4	3	7
Pharmacy Assistants	187	215	28	43	71
All Other Health Service Workers	230	264	34	15	49
Maids & Housekeeping Cleaners	4,045	4,923	878	1,002	1,880
Janitors & Cleaners, Exc. Maids & Housekeeping	5,392	6,851	1,459	1,000	2,459
Pest Controllers & Assistants	534	685	151	63	214
All Other Cleaning/Building Service, Exc. Private House	337	413	76	57	133

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Barbers	235	301	66	38	104
Hairdressers, Hairstylists, & Cosmetologists	3,272	4,218	946	904	1,850
Manicurists	317	406	89	86	175
Shampooers	44	55	11	11	22
Amusement & Recreation Attendants	948	1,215	267	142	409
Guides	38	48	10	7	17
Ushers, Lobby Attendants, & Ticket Takers	429	552	123	62	185
Baggage Porters & Bellhops	390	482	92	28	120
Wardrobe, Locker, & Dressing Room Attendants	72	92	20	8	28
Social Welfare Service Aides	163	208	45	29	74
Child Care Workers	1,241	1,589	348	345	693
Funeral Attendants	63	81	18	13	31
All Other Service Workers	1,566	1,985	419	320	739
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	1,553	1,956	403	297	700
Gardeners & Groundskeepers, Exc. Farm	1,383	1,741	358	269	627
Animal Caretakers, Exc. Farm	131	167	36	25	61
All Other Agrl., Forestry, Fishing, & Related	39	48	9	3	12
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	23,114	29,272	6,158	2,292	8,450
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	617	779	162	81	243
First Line Managers/Supervisors - Construction Trades & Extraction Workers	137	169	32	10	42
First Line Mgrs./Supers. - Production & Ops.	36	46	10	2	12
First Line Mgrs./Supers. - Transport. Operatives	64	76	12	8	20
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	253	311	58	44	102
Precision Inspectors, Testers, & Graders	745	954	209	88	297
Production Inspectors, Testers, & Graders	147	186	39	15	54
All Other Inspectors, Testers, & Related	63	79	16	8	24
All Machinery Maintenance Mechanics	35	42	7	2	9
Maintenance Repairers, General Utility	1,612	1,999	387	137	524
Automotive Mechanics	1,735	2,234	499	146	645
Automotive Body & Related Repairers	598	771	173	58	231
Bus & Truck Mechs., & Diesel Eng. Specialists	259	331	72	20	92
Small Engine Specialists	39	49	10	2	12
Data Processing Equipment Repairers	125	159	34	6	40
Electronic Home Entertainment Equip. Repairers	93	120	27	6	33
Electric Home Appliance & Power Tool Repairers	121	154	33	14	47
Electric Motor, Transformer, & Rel. Repairers	209	269	60	19	79
Electronics Repairers, Commercial & Ind. Equip.	71	90	19	3	22
All Other Electrical Mechs./Installers/Repairers	210	268	58	15	73
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	307	384	77	28	105
Precision Instrument Repairers	46	58	12	3	15
Electromedical & Biomedical Equip. Repairers	38	43	5	3	8
Locksmiths & Safe Repairers	45	58	13	4	17
Coin & Vending Machine Servicers & Repairers	65	82	17	5	22
Tire Repairers & Changers	121	155	34	14	48
Menders - Garments, Linens, & Related	23	27	4	2	6
All Other Mechanics, Installers, & Repairers	828	1,052	224	69	293
Carpenters	203	249	46	19	65
Electricians	166	205	39	13	52
Painters & Paperhangers - Construction & Maintenance	109	133	24	10	34
Plumbers, Pipefitters, & Steamfitters	98	121	23	8	31
All Other Construction Trades Workers	19	21	2	1	3
All Extraction Workers, Exc. Helpers	323	412	89	23	112
Precision Instrument Makers	44	56	12	7	19
Machinists	100	127	27	9	36

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Tool Grinders, Filers, Sharpeners (Precision)	49	63	14	5	19
All Other Precision Metal Workers	16	20	4	1	5
All Precision Woodworkers	34	41	7	1	8
Custom Tailors & Sewers	54	69	15	9	24
Upholsterers	281	361	80	43	123
Spotters, Dry Cleaning	53	68	15	9	24
Pressers, Delicate Fabrics	105	135	30	14	44
All Other Precision Textile & Apparel Workers	23	29	6	2	8
Precision Photographic Process Workers	73	91	18	9	27
Precision Dental Laboratory Technicians	299	345	46	39	85
All Other Precision Workers	153	192	39	12	51
Machine Setters, Operators, & Tenders	240	309	69	24	93
Machine Forming Operators & Tenders - Metal & Plastic	46	58	12	5	17
Offset Litho. Press Setters & Set-Up Oper.	52	65	13	7	20
Printing Press Machine Operators & Tenders	87	109	22	8	30
Photoengraving & Lithographing Machine Oper.	122	155	33	14	47
Bindery Machine Operators	43	54	11	4	15
Sewing Machine Operators, Garment	31	40	9	4	13
Sewing Machine Operators, Non-Garment	35	44	9	4	13
Laundry/Drycleaning Mach. Oper., Exc. Pressing	1,285	1,615	330	126	456
Pressing Machine Oper. - Textile & Garments	313	403	90	43	133
Motion Picture Projectionists	82	105	23	19	42
Photographic Processing Mach. Oper. & Tenders	459	588	129	53	182
Painters, Transportation Equipment	136	175	39	15	54
Packaging & Filling Machine Oper. & Tenders	52	65	13	5	18
All Other Machine Setters & Set-Up Operators	276	348	72	28	100
All Other Machine Operators & Tenders	257	322	65	24	89
Welders & Cutters	149	189	40	12	52
Pressers, Hand	76	98	22	9	31
Painting, Coating, & Decorating Workers, Hand	104	132	28	9	37
Engraving & Printing Workers, Hand	51	64	13	2	15
All Other Hand Workers	1,269	1,619	350	143	493
Stationary Engineers	53	61	8	6	14
All Other Plant & System Operators	29	35	6	2	8
Truck Drivers, Light - Incl. Delivery & Route	1,368	1,729	361	93	454
Bus Drivers	50	61	11	5	16
Bus Drivers, School	38	49	11	5	16
Taxi Drivers & Chauffeurs	50	60	10	6	16
Driving Sales Workers	237	301	64	14	78
All Other Motor Vehicle Operators	174	213	39	9	48
Service Station Attendants	173	222	49	19	68
Parking Lot Attendants	122	155	33	9	42
All Other Transportation & Related Workers	50	61	11	2	13
Industrial Truck & Tractor Operators	182	231	49	13	62
All Other Transportation & Moving Equip. Oper.	278	352	74	20	94
Mechanic & Repairer Helpers	166	211	45	17	62
Freight, Stock, & Material Movers, Hand	400	507	107	41	148
Hand Packers & Packagers	110	140	30	11	41
Vehicle Washers & Equipment Cleaners	968	1,248	280	114	394
All Other Helpers & Laborers	2,657	3,396	739	302	1,041
TOTAL ALL OCCUPATIONS	172,376	213,458	41,082	27,730	68,812

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineers
Metallurgical & Materials Engineers
Nuclear Engineers

All Other Physical Scientists
Physicists & Astronomers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MARICOPA COUNTY (CONTD.)

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Other Physical & Life Science Techs.
Nuclear Technicians & Technologists

All Other Mathematical Scientists
Actuaries

All Other Teachers & Instructors
Teachers, Elementary School

All Other Professional, Paraprofessional,
& Technical Workers
Reporters & Correspondents
Announcers, Radio & Television
Camera Operators, Television & Motion Picture
Broadcast Technicians
Film Editors
Music Directors, Singers, Composers, & Related

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Machinery Maintenance Mechanics
Machinery Maintenance Mechs., Marine Equip.

All Other Mechanics, Installers, & Repairers
Motorcycle Repairers
Mobile Heavy Equip. Mechanics, Exc. Engines
Watchmakers
Office Machine & Cash Register Servicers
Installers/Repairers - Manufactured Buildings

All Other Extraction Workers, Exc. Helpers
Septic Tank Servicers & Sewer Pipe Cleaners

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Precision Metal Workers
Precision Hand Workers, Jewelry & Related
Boilermakers

All Precision Woodworkers
Cabinetmakers & Bench Carpenters
Furniture Finishers

All Other Precision Textile & Apparel Workers
Shoe & Leather Workers & Repairers - Precision

All Other Precision Workers
Medical Appliance Makers

All Other Machine Setters & Set-Up Operators
Coating & Painting Machine Set-Up Operators

All Other Machine Operators & Tenders
Furnace, Kiln, Oven, Drier, or Kettle Ops.
Coating, Painting, & Spraying Machine Ops.

All Other Hand Workers
Solderers & Brazers
Sewers, Hand

All Other Transportation & Related Workers
Aircraft Pilots & Flight Engineers

All Other Helpers & Laborers
Machine Feeders & Offbearers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MOHAVE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	102	111	9	5	14
Financial Managers	16	16	0	0	0
Medicine & Health Services Managers	5	5	0	0	0
Food Service & Lodging Managers	29	33	4	4	8
General Managers & Top Executives	38	43	5	1	6
All Other Managers & Administrators	14	14	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	559	633	74	67	141
Tax Preparers	18	20	2	1	3
Accountants & Auditors	19	21	2	1	3
All Other Management Support Workers	12	12	0	0	0
All Engineers	8	9	1	1	2
All Engineering & Related Technicians	21	23	2	0	2
All Social Scientists	3	3	0	0	0
Teachers, Preschool & Kindergarten	13	15	2	2	4
Instructors & Coaches, Sports & Physical Trng.	12	14	2	1	3
All Other Teachers & Instructors	9	9	0	1	1
Physicians & Surgeons	53	61	8	7	15
Dentists	15	17	2	1	3
All Other Health Diagnosing/Treating Practitioners	11	11	0	0	0
Respiratory Therapists	7	8	1	1	2
All Other Therapists	5	5	0	0	0
Registered Nurses	94	108	14	17	31
Licensed Practical Nurses	83	95	12	16	28
Medical & Clinical Laboratory Technologists	18	20	2	2	4
Medical & Clinical Laboratory Technicians	12	13	1	1	2
Dental Hygienists	28	32	4	5	9
Medical Records Technicians & Technologists	5	5	0	1	1
Radiologic Technicians	16	17	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	26	27	1	2	3
All Other Professional, Paraprofessional, & Technical Workers	71	88	17	6	23
SALES & RELATED OCCUPATIONS	69	87	18	8	26
First Line Supervisors & Managers - Sales	7	7	0	0	0
Salespersons, Retail	25	29	4	2	6
Cashiers	17	19	2	2	4
All Other Sales & Related Workers	20	32	12	4	16
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	517	590	73	68	141
First Line Supers.-Clerical & Admin. Support	10	12	2	0	2
Hotel Desk Clerks	123	146	23	26	49
Teacher Aides & Ed. Assistants, Clerical	18	20	2	1	3
Legal Secretaries	17	20	3	3	6
Medical Secretaries	23	26	3	4	7
All Other Secretaries	61	71	10	7	17
Receptionists & Information Clerks	35	39	4	4	8
Typists	24	26	2	4	6
File Clerks	7	7	0	0	0
Interviewing Clerks, Exc. Personnel & Welfare	10	11	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	50	56	6	6	12
Payroll & Timekeeping Clerks	6	7	1	0	1
Billing, Cost & Rate Clerks	17	18	1	1	2
General Office Clerks	63	69	6	8	14
All Office Machine Operators	7	7	0	0	0
All Communication Equipment Operators	8	12	4	2	6
Stock Clerks - Stockroom, Warehouse, or Yard	6	6	0	0	0
All Other Material Recording/Scheduling/Dist.	3	3	0	0	0
All Other Clerical & Administrative Support	29	34	5	1	6

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MOHAVE COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
SERVICE OCCUPATIONS	1,118	1,303	185	193	378
Housekeepers	29	33	4	3	7
All Other Service Supervisors & Managers	12	12	0	0	0
Guards & Watch Guards	28	33	5	0	5
Bartenders	41	47	6	4	10
Waiters & Waitresses	120	140	20	25	45
Food Servers, Outside	11	12	1	1	2
Dining Room/Cafeteria Attends. & Bartdr. Helpers	34	39	5	1	6
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	18	20	2	3	5
Cooks, Restaurant	40	46	6	5	11
Cooks, Institution or Cafeteria	17	18	1	1	2
Food Preparation Workers	52	59	7	7	14
Combined Food Preparation & Service Workers	5	5	0	0	0
All Other Food Service Workers	24	26	2	2	4
Dental Assistants	21	24	3	5	8
Medical Assistants	38	43	5	8	13
Nursing Aides, Orderlies, & Attendants	68	78	10	14	24
All Other Health Service Workers	11	12	1	0	1
Maids & Housekeeping Cleaners	331	390	59	79	138
Janitors & Cleaners, Exc. Maids & Housekeeping	72	90	18	9	27
All Other Cleaning/Building Service, Exc. Private House	15	25	10	1	11
Hairdressers, Hairstylists, & Cosmetologists	54	63	9	14	23
Amusement & Recreation Attendants	30	34	4	1	5
Baggage Porters & Bellhops	6	7	1	0	1
Child Care Workers	35	41	6	0	15
All Other Service Workers	6	6	0	1	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	74	85	11	9	20
Gardeners & Groundskeepers, Exc. Farm	39	44	5	6	11
All Other Agri., Forestry, Fishing, & Related	35	41	6	3	9
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	362	431	69	20	89
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	13	15	2	0	2
All First Line Managers/Supervisors - Maintenance/Production/Construction	6	6	0	1	1
Maintenance Repairers, General Utility	77	91	14	4	18
Automotive Body & Related Repairers	19	22	3	1	4
Bus & Truck Mechs., & Diesel Eng. Specialists	44	52	8	3	11
All Electrical Mechs./Installers/Repairers	21	24	3	1	4
All Other Mechanics, Installers, & Repairers	30	37	7	1	8
All Construction Trades Workers	1	1	0	0	0
All Extraction Workers, Exc. Helpers	4	4	0	0	0
All Precision Workers	9	10	1	0	1
Laundry/Drycleaning Mach. Opers., Exc. Pressing	52	59	7	4	11
All Other Machine Operators & Tenders	10	11	1	1	2
Truck Drivers, Light - Incl. Delivery & Route	18	22	4	1	5
All Other Motor Vehicle Operators	28	44	16	1	17
All Freight & Material Movers, Hand	6	7	1	0	1
All Helpers & Laborers	24	26	2	2	4
TOTAL ALL OCCUPATIONS	2,801	3,240	439	370	809

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers
Civil Engineers, Incl. Traffic

All Engineering & Related Technicians
Drafters
Surveying & Mapping Techs.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

MOHAVE COUNTY (CONTD.)

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Other Teachers & Instructors
Teachers & Instructors, Voc. Ed. & Training

All Other Health Diagnosing/Treating
Practitioners
Optometrists

All Other Health Professionals,
Paraprofessionals, & Technicians
Dietetic Technicians

All Other Professional, Paraprofessional,
& Technical Workers
Social Workers, Medical & Psychiatric
Recreation Workers
Lawyers
Musicians, Instrumental

SALES & RELATED OCCUPATIONS

All Other Sales & Related Workers
Counter & Rental Clerks

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Communication Equipment Operators
Switchboard Operators

All Other Clerical & Administrative Support
Bill & Account Collectors

SERVICE OCCUPATIONS

All Other Health Service Workers
Home Health Aides

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Electrical Mechs./Installers/Repairers
Electronic Home Entertainment Equip. Repairers
Electric Home Appliance & Power Tool Repairers

All Other Mechanics, Installers, & Repairers
Small Engine Specialists

All Precision Workers
Precision Dental Laboratory Technicians

All Other Machine Operators & Tenders
Motion Picture Projectionists

All Other Motor Vehicle Operators
Driving Sales Workers

All Helpers & Laborers
Vehicle Washers & Equipment Cleaners

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

NAVAJO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	181	200	19	12	31
Financial Managers	15	15	0	0	0
Administrative Services Managers	12	13	1	1	2
Medicine & Health Services Managers	17	19	2	0	2
Food Service & Lodging Managers	16	17	1	0	1
General Managers & Top Executives	34	37	3	2	5
All Other Managers & Administrators	87	99	12	9	21
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1,035	1,175	140	130	270
Accountants & Auditors	25	28	3	2	5
All Other Financial Specialists	6	6	0	0	0
Purchasing Agents, Exc. Wholesale, Retail, & Farm	5	5	0	0	0
All Other Management Support Workers	127	147	20	16	36
All Engineering & Related Technicians	35	40	5	1	6
All Physical Scientists	1	1	0	0	0
All Life Scientists	4	4	0	0	0
All Other Physical & Life Science Techs.	18	21	3	1	4
All Mathematical Scientists	2	2	0	0	0
All Social Scientists	7	7	0	0	0
Social Workers, Medical & Psychiatric	35	40	5	5	10
Social Workers, Exc. Medical & Psychiatric	52	61	9	9	18
Social Service Technicians	55	64	9	4	13
All Religious Workers	5	5	0	0	0
Lawyers	13	14	1	1	2
All Legal Assistants/Techs., Exc. Clerical	3	3	0	0	0
Teachers, Preschool & Kindergarten	62	73	11	11	22
Instructors, Nonvocational Education	14	16	2	1	3
Instructors & Coaches, Sports & Physical Trng.	32	37	5	2	7
All Other Teachers & Instructors	21	24	3	4	7
Vocational & Educational Counselors	20	22	2	2	4
Physicians & Surgeons	20	22	2	2	4
Dentists	14	15	1	1	2
All Other Health Diagnosing/Treating Practitioners	8	8	0	1	1
All Therapists	5	5	0	0	0
Registered Nurses	82	93	11	14	25
Licensed Practical Nurses	28	32	4	5	9
Physician Assistants	7	7	0	1	1
Pharmacists	5	5	0	1	1
Dietitians & Nutritionists	7	7	0	0	0
Dietetic Technicians	79	93	14	16	30
Medical & Clinical Laboratory Technologists	6	6	0	1	1
Medical & Clinical Laboratory Technicians	5	5	0	0	0
Dental Hygienists	14	16	2	3	5
Medical Records Technicians & Technologists	8	9	1	1	2
Radiologic Technicians	14	15	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	102	117	15	19	34
All Other Professional, Paraprofessional, & Technical Workers	89	100	11	5	16
SALES & RELATED OCCUPATIONS	136	155	19	19	38
First Line Supervisors & Managers - Sales	28	32	4	3	7
All Other Sales Representatives & Salespersons, Service	1	1	0	0	0
Cashiers	77	89	12	13	25
All Other Sales & Related Workers	30	33	3	3	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	739	869	130	120	250
First Line Supers.-Clerical & Admin. Support	25	27	2	2	4
Hotel Desk Clerks	58	67	9	12	21

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

NAVAJO COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Teacher Aides & Ed. Assistants, Clerical	131	154	23	22	45
Medical Secretaries	6	6	0	1	1
All Other Secretaries	114	131	17	20	37
Receptionists & Information Clerks	32	34	2	5	7
Typists	48	55	7	10	17
File Clerks	40	47	7	11	18
Bookkeeping, Accounting, & Auditing Clerks	52	57	5	7	12
Payroll & Timekeeping Clerks	8	8	0	0	0
Billing, Cost & Rate Clerks	30	32	2	4	6
General Office Clerks	26	28	2	2	4
Computer Operators, Exc. Peripheral Equipment	6	6	0	0	0
All Other Office Machine Operators	6	6	0	0	0
Switchboard Operators	68	110	42	20	62
Stock Clerks - Stockroom, Warehouse, or Yard	22	25	3	2	5
All Other Material Recording/Scheduling/Dist.	8	10	2	0	2
All Other Clerical & Administrative Support	59	66	7	2	9
SERVICE OCCUPATIONS	1,044	1,226	182	170	352
Housekeepers	24	27	3	3	6
All Other Service Supervisors & Managers	36	44	8	6	14
Guards & Watch Guards	68	98	30	3	33
Bartenders	30	34	4	2	6
Waiters & Waitresses	104	123	19	22	41
Dining Room/Cafeteria Atttds. & Bartdr. Helpers	40	46	6	1	7
Cooks, Restaurant	51	59	8	6	14
Cooks, Institution or Cafeteria	53	59	6	5	11
Food Preparation Workers	82	94	12	13	25
All Other Food Service Workers	13	13	0	0	0
Dental Assistants	19	22	3	5	8
Medical Assistants	13	14	1	2	3
Nursing Aides, Orderlies, & Attendants	44	50	6	9	15
Psychiatric Aides	6	7	1	1	2
All Other Health Service Workers	2	2	0	0	0
Maids & Housekeeping Cleaners	200	235	35	47	82
Janitors & Cleaners, Exc. Maids & Housekeeping	86	99	13	14	27
All Other Cleaning/Building Service, Exc.					
Private House	3	3	0	0	0
Hairdressers, Hairstylists, & Cosmetologists	40	47	7	10	17
Amusement & Recreation Attendants	46	54	8	6	14
Social Welfare Service Aides	8	8	0	0	0
Child Care Workers	19	21	2	4	6
All Other Service Workers	57	67	10	11	21
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	139	163	24	17	41
Gardeners & Groundskeepers, Exc. Farm	33	38	5	5	10
All Other Agri., Forestry, Fishing, & Related	106	125	19	12	31
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,047	1,214	167	86	253
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	26	30	4	2	6
First Line Managers/Supervisors - Construction Trades & Extraction Workers	21	24	3	2	5
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	17	19	2	2	4
Inspectors & Related Occupations	13	15	2	1	3
Maintenance Repairers, General Utility	151	175	24	12	36
Automotive Mechanics	13	14	1	0	1
All Other Mechanics, Installers, & Repairers	101	115	14	6	20
Carpenters	23	26	3	2	5
Electricians	18	21	3	1	4
Painters & Paperhangers - Construction & Maintenance	15	19	4	1	5

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

NAVAJO COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Plumbers, Pipefitters, & Steamfitters	15	17	2	1	3
All Electrical Mechs./Installers/Repairers	6	7	1	0	1
All Extraction Workers, Exc. Helpers	40	47	7	3	10
All Precision Workers	102	119	17	9	26
Laundry/Drycleaning Mach. Opers., Exc. Pressing	39	44	5	3	8
All Machine Setters & Set-Up Operators	9	10	1	1	2
All Other Machine Operators & Tenders	37	43	6	4	10
All Hand Workers	2	2	0	0	0
All Plant & System Operators	6	7	1	0	1
Truck Drivers, Light - Incl. Delivery & Route	13	15	2	0	2
Bus Drivers	27	30	3	2	5
All Other Motor Vehicle Operators	61	71	10	4	14
All Transportation & Related Workers	2	2	0	0	0
All Transportation & Moving Equip. Operators	38	45	7	3	10
Freight, Stock, & Material Movers, Hand	30	35	5	3	8
All Helpers & Laborers	222	262	40	24	64
TOTAL ALL OCCUPATIONS	4,321	5,002	681	554	1,235

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Education Administrators

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Employment Interviewers
Personnel, Training, & Labor Rel. Specialists
Compliance & Enforcement Inspectors, Exc. Const.

All Engineering & Related Technicians
Surveying & Mapping Scientists
Surveying & Mapping Techs.

All Other Teachers & Instructors
Teachers & Instructors, Voc. Ed. & Training

All Other Health Professionals,
Paraprofessionals, & Technicians
Opticians, Dispensing & Measuring

All Other Professional, Paraprofessional,
& Technical Workers
Recreation Workers
Instructional Coordinators

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Secretaries
Legal Secretaries

All Other Clerical & Administrative Support
Welfare Eligibility Workers & Interviewers
Interviewing Clerks, Exc. Personnel & Welfare

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other First Line Managers/Supervisors -
Maintenance/Production/Construction
First Line Mgrs./Supers. - Transport. Operatives

All Other Mechanics, Installers, & Repairers
Automotive Body & Related Repairers
Bus & Truck Mechs., & Diesel Eng. Specialists

All Electrical Mechs./Installers/Repairers
Electronic Home Entertainment Equip. Repairers

All Helpers & Laborers
Mechanic & Repairer Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES
PIMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS					
Financial Managers	2,697	3,374	677	281	958
Personnel, Training, & Labor Relations Mgrs.	423	528	105	37	142
Purchasing Managers	71	80	9	3	12
Marketing, Advertising, & Public Rel. Mgrs.	31	36	5	2	7
Administrative Services Managers	190	244	54	21	75
Education Administrators	136	169	33	10	43
Medicine & Health Services Managers	25	30	5	2	7
Construction Managers	193	218	25	19	44
Food Service & Lodging Managers	29	38	9	3	12
General Managers & Top Executives	193	250	57	25	82
All Other Managers & Administrators	976	1,253	277	109	386
	430	528	98	50	148
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL					
Tax Preparers	15,601	19,059	3,458	2,323	5,781
Accountants & Auditors	38	49	11	5	16
Budget Analysts	522	666	144	68	212
All Other Financial Specialists	21	25	4	2	6
Purchasing Agents, Exc. Wholesale, Retail, & Farm	41	54	13	3	16
Employment Interviewers	72	87	15	5	20
Personnel, Training, & Labor Rel. Specialists	102	136	34	12	46
Cost Estimators	81	95	14	4	18
Compliance & Enforcement Inspectors, Exc. Const.	33	43	10	6	16
All Other Management Support Workers	12	14	2	1	3
Metallurgical & Materials Engineers	329	415	86	39	125
Civil Engineers, Incl. Traffic	22	29	7	0	7
Agricultural Engineers	181	237	56	25	81
Electrical & Electronic Engineers	40	54	14	3	17
Mechanical Engineers	115	152	37	5	42
All Other Engineers	57	74	17	2	19
Architects, Exc. Landscape & Marine	46	58	12	1	13
Landscape Architects	230	302	72	31	103
Civil Engineering Technicians & Technologists	19	25	6	2	8
Electrical/Electronic Engineering Technicians	76	100	24	10	34
Industrial Engineering Techs.	88	114	26	3	29
Mechanical Engineering Techs.	12	15	3	1	4
Drafters	16	19	3	0	3
Surveying & Mapping Techs.	401	526	125	32	157
All Other Engineering & Related Technicians	195	256	61	13	74
Chemists, Exc. Biochemists	70	90	20	6	26
Geologists, Geophysicists, & Oceanographers	21	28	7	2	9
All Other Physical Scientists	35	44	9	1	10
Biological Scientists	68	87	19	3	22
Medical Scientists	19	22	3	1	4
All Other Life Scientists	13	14	1	1	2
Chemical Techs., Exc. Health	1	1	0	0	0
All Other Physical & Life Science Techs.	85	116	31	9	40
Systems Analysts, Electronic Data Processing	67	89	22	6	28
Computer Programmers	65	85	20	1	21
Computer Programmer Aides	164	212	48	5	53
All Mathematical Scientists	8	9	1	0	1
Urban & Regional Planners	16	20	4	0	4
Psychologists	11	14	3	0	3
All Other Social Scientists	47	52	5	2	7
Social Workers, Medical & Psychiatric	52	68	16	2	18
Social Workers, Exc. Medical & Psychiatric	316	378	62	53	115
Social Service Technicians	248	318	70	41	111
Recreation Workers	234	292	58	18	76
Clergy	68	89	21	9	30
All Other Religious Workers	23	27	4	2	6
Lawyers	6	7	1	0	1
	534	701	167	61	228

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Law Clerks	59	77	18	6	24
Paralegal Personnel	106	138	32	11	43
All Other Legal Assistants/Techs., Exc. Clerical	29	37	8	5	13
Nursing Instructors	30	34	4	1	5
Teachers, Preschool & Kindergarten	507	665	158	97	255
Teachers & Instructors, Voc. Ed. & Training	72	92	20	12	32
Instructors, Nonvocational Education	102	131	29	9	38
Instructors & Coaches, Sports & Physical Trng.	440	577	137	46	183
All Other Teachers & Instructors	66	81	15	12	27
Vocational & Educational Counselors	84	109	25	10	35
Instructional Coordinators	25	31	6	1	7
Physicians & Surgeons	1,107	1,268	161	164	325
Dentists	185	211	26	18	44
Optometrists	44	49	5	5	10
All Other Health Diagnosing/Treating Practitioners	8	9	1	2	3
Respiratory Therapists	172	196	24	26	50
Occupational Therapists	30	33	3	3	6
Physical Therapists	121	137	16	17	33
Speech Pathologists & Audiologists	13	14	1	1	2
Recreational Therapists	38	42	4	5	9
All Other Therapists	6	6	0	0	0
Registered Nurses	3,309	3,846	537	645	1,182
Licensed Practical Nurses	1,023	1,202	179	227	406
Emergency Medical Technicians	8	8	0	1	1
Physician Assistants	86	97	11	18	29
Opticians, Dispensing & Measuring	59	67	8	8	16
Pharmacists	129	147	18	27	45
Dietitians & Nutritionists	59	65	6	8	14
Dietetic Technicians	67	83	16	13	29
Medical & Clinical Laboratory Technologists	351	401	50	62	112
Medical & Clinical Laboratory Technicians	132	149	17	17	34
Dental Hygienists	181	207	26	40	66
Medical Records Technicians & Technologists	96	107	11	21	32
Nuclear Medicine Technologists	17	19	2	2	4
Radiologic Technologists	165	188	23	25	48
Radiologic Technicians	102	115	13	14	27
Electroencephalograph Techs.	13	14	1	1	2
Electrocardiograph Techs.	38	43	5	5	10
Surgical Technicians	88	100	12	12	24
All Other Health Professionals, Paraprofessionals, & Technicians	622	815	193	140	333
Writers & Editors	69	90	21	10	31
Technical Writers	9	11	2	0	2
Public Rel. Specialists & Publicity Writers	116	145	29	11	40
Reporters & Correspondents	90	122	32	17	49
Photographers	58	75	17	5	22
Artists & Related Workers	31	38	7	3	10
Designers, Exc. Interior Designers	68	87	19	4	23
Musicians, Instrumental	120	156	36	17	53
Dancers & Choreographers	11	14	3	3	6
Producers, Directors, Actors, & Entertainers	47	61	14	4	18
Athletes, Coaches, Umpires, & Related Workers	41	53	12	3	15
Funeral Directors & Morticians	38	50	12	3	15
Embalmers	11	14	3	1	4
All Other Professional, Paraprofessional, & Technical Workers	183	225	42	9	51
SALES & RELATED OCCUPATIONS	1,737	2,255	518	272	790
First Line Supervisors & Managers - Sales	187	237	50	17	67
Sales Agents, Selected Business Services	155	209	54	24	78

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Sales Agents, Advertising	26	34	8	2	10
All Other Sales Representatives & Salespersons, Service	58	78	20	7	27
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	21	25	4	1	5
Other Sales Representatives, Exc. Retail	55	69	14	6	20
Salespersons, Retail	43	54	11	4	15
Salespersons, Parts	38	50	12	4	16
Counter & Rental Clerks	393	515	122	79	201
Cashiers	430	557	127	83	210
News/Street Vendors, Phone Solicitors, Door- to-Door Sales Workers	8	9	1	1	2
Demonstrators, Promoters, & Models	38	52	14	7	21
All Other Sales & Related Workers	285	366	81	37	118
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	8,833	10,942	2,109	1,606	3,715
First Line Supers.-Clerical & Admin. Support	374	459	85	38	123
Welfare Eligibility Workers & Interviewers	35	45	10	5	15
Bill & Account Collectors	58	79	21	9	30
Travel Clerks	28	36	8	6	14
Hotel Desk Clerks	298	406	108	66	174
Teacher Aides & Ed. Assistants, Clerical	155	202	47	26	73
Legal Secretaries	454	597	143	109	252
Medical Secretaries	277	315	38	61	99
All Other Secretaries	1,333	1,707	374	299	673
Stenographers	6	7	1	0	1
Receptionists & Information Clerks	1,002	1,220	218	207	425
Typists	351	411	60	80	140
Typists, Word Processing Equipment	153	197	44	12	56
Personnel Clerks, Exc. Payroll & Timekeeping	33	36	3	6	9
File Clerks	145	167	22	32	54
Order Clerks - Materials, Merch., & Service	38	42	4	5	9
Procurement Clerks	16	18	2	1	3
Statistical Clerks	94	108	14	17	31
Interviewing Clerks, Exc. Personnel & Welfare	384	491	107	61	168
Bookkeeping, Accounting, & Auditing Clerks	940	1,188	248	173	421
Payroll & Timekeeping Clerks	64	71	7	3	10
Billing, Cost & Rate Clerks	154	174	20	29	49
General Office Clerks	1,120	1,376	256	228	484
Billing, Posting, & Calculating Machine Opers.	38	44	6	4	10
Duplicating Machine Operators	7	8	1	0	1
Computer Operators, Exc. Peripheral Equipment	81	99	18	3	21
Peripheral EDP Equipment Operators	45	58	13	10	23
Data Entry Keyers, Exc. Composing	179	214	35	8	43
All Other Office Machine Operators	10	11	1	1	2
Switchboard Operators	318	398	80	79	159
Mail Clerks, Exc. Mail Machine Operators & Postal Service	5	6	1	0	1
Messengers	23	28	5	2	7
Dispatchers - Police, Fire, & Ambulance	7	8	1	0	1
Production, Planning, & Expediting Clerks	23	30	7	4	11
Stock Clerks - Stockroom, Warehouse, or Yard	154	179	25	14	39
Traffic, Shipping, & Receiving Clerks	39	45	6	1	7
All Other Material Recording/Scheduling/Dist.	12	13	1	0	1
All Other Clerical & Administrative Support	380	449	69	7	76
SERVICE OCCUPATIONS	13,356	17,031	3,675	2,581	6,256
First Line Supers. & Mgrs./Supers. - Service	89	112	23	16	39
Housekeepers	305	383	78	46	124
All Other Service Supervisors & Managers	183	233	50	32	82
Guards & Watch Guards	436	576	140	23	163
All Other Protective Service Workers	30	40	10	4	14

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	65	86	21	13	34
Bartenders	319	425	106	47	153
Waiters & Waitresses	960	1,293	333	222	555
Food Servers, Outside	172	220	48	15	63
Dining Room/Cafeteria Attends. & Bartdr. Helpers	398	514	116	21	137
Counter Attendants - Lunchroom, Coffee Shop, & Cafeteria	157	202	45	34	79
Bakers, Bread & Pastry	21	26	5	3	8
Cooks, Restaurant	342	460	118	53	171
Cooks, Institution or Cafeteria	240	295	55	34	89
Cooks, Specialty Fast Food	16	19	3	1	4
Cooks, Short Order	17	22	5	1	6
Food Preparation Workers	565	709	144	100	244
All Other Food Service Workers	189	237	48	31	79
Dental Assistants	346	396	50	96	146
Medical Assistants	350	398	48	78	126
Nursing Aides, Orderlies, & Attendants	1,634	1,886	252	363	615
Home Health Aides	145	186	41	15	56
Psychiatric Aides	77	95	18	16	34
Physical & Corrective Therapy Assists./Aides	71	79	8	14	22
Ambulance Drivers & Attendants - Exc.					
Emergency Medical Technicians	10	11	1	1	2
Pharmacy Assistants	72	81	9	15	24
All Other Health Service Workers	225	279	54	12	66
Maids & Housekeeping Cleaners	1,384	1,758	374	343	717
Janitors & Cleaners, Exc. Maids & Housekeeping	1,807	2,420	613	335	948
Pest Controllers & Assistants	202	277	75	24	99
All Other Cleaning/Building Service, Exc.					
Private House	123	161	38	19	57
Barbers	65	84	19	10	29
Hairdressers, Hairstylists, & Cosmetologists	1,113	1,464	351	309	660
Manicurists	30	38	8	7	15
Shampooers	10	13	3	2	5
Amusement & Recreation Attendants	311	406	95	45	140
Ushers, Lobby Attendants, & Ticket Takers	38	49	11	5	16
Baggage Porters & Bellhops	108	147	39	8	47
Wardrobe, Locker, & Dressing Room Attendants	12	14	2	1	3
Social Welfare Service Aides	43	54	11	6	17
Child Care Workers	383	501	118	104	222
All Other Service Workers	293	382	89	57	146
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	434	560	126	71	197
Gardeners & Groundskeepers, Exc. Farm	319	410	91	57	148
Animal Caretakers, Exc. Farm	43	54	11	7	18
All Other Agri., Forestry, Fishing, & Related	72	96	24	7	31
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	4,714	6,022	1,308	392	1,700
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	206	262	56	25	81
First Line Managers/Supervisors - Construction Trades & Extraction Workers	57	71	14	2	16
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	86	105	19	11	30
Precision Inspectors, Testers, & Graders	13	17	4	1	5
Production Inspectors, Testers, & Graders	7	8	1	0	1
All Other Inspectors, Testers, & Related	3	3	0	0	0
Machinery Maintenance Mechanics	14	16	2	0	2
Maintenance Repairers, General Utility	424	543	119	28	147
Automotive Mechanics	537	706	169	45	214
Automotive Body & Related Repairers	194	255	61	19	80
Electronic Home Entertainment Equip. Repairers	56	73	17	3	20
Electric Home Appliance & Power Tool Repairers	58	74	16	5	21

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Electric Motor, Transformer, & Rel. Repairers	32	42	10	3	13
All Other Electrical Mechs./Installers/Repairers	73	98	25	4	29
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	77	96	19	5	24
Electromedical & Biomedical Equip. Repairers	6	6	0	0	0
Locksmiths & Safe Repairers	82	107	25	7	32
Menders - Garments, Linens, & Related	12	15	3	1	4
All Other Mechanics, Installers, & Repairers	163	203	40	7	47
Carpenters	71	84	13	6	19
Electricians	51	61	10	3	13
Painters & Paperhangers - Construction & Maintenance	31	36	5	2	7
Plumbers, Pipefitters, & Steamfitters	26	31	5	1	6
All Other Construction Trades Workers	5	5	0	0	0
All Extraction Workers, Exc. Helpers	64	84	20	4	24
Machinists	29	35	6	1	7
All Other Precision Metal Workers	2	2	0	0	0
All Precision Woodworkers	3	3	0	0	0
Upholsterers	40	52	12	6	18
Spotters, Dry Cleaning	16	21	5	2	7
Pressers, Delicate Fabrics	39	51	12	5	17
All Other Precision Textile & Apparel Workers	21	25	4	2	6
All Precision Printing Workers	6	7	1	0	1
Precision Dental Laboratory Technicians	105	120	15	13	28
All Other Precision Workers	78	102	24	5	29
Printing Press Machine Operators & Tenders	22	30	8	2	10
All Other Printing & Related Machine Oper.	5	6	1	0	1
Sewing Machine Operators, Garment	20	26	6	2	8
Laundry/Drycleaning Mach. Oper., Exc. Pressing	357	458	101	33	134
Pressing Machine Oper. - Textile & Garments	71	93	22	9	31
Motion Picture Projectionists	27	34	7	5	12
Painters, Transportation Equipment	18	23	5	2	7
All Machine Setters & Set-Up Operators	23	27	4	0	4
All Other Machine Operators & Tenders	27	32	5	1	6
Welders & Cutters	30	37	7	2	9
Pressers, Hand	15	19	4	1	5
Sewers, Hand	7	7	0	0	0
All Other Hand Workers	217	293	76	22	98
Stationary Engineers	31	35	4	3	7
Truck Drivers, Light - Incl. Delivery & Route	235	295	60	11	71
Bus Drivers	12	15	3	0	3
All Other Motor Vehicle Operators	84	105	21	4	25
Service Station Attendants	39	50	11	4	15
Parking Lot Attendants	14	16	2	0	2
All Other Transportation & Moving Equip. Operators	7	8	1	0	1
Mechanic & Repairer Helpers	24	31	7	2	9
Machine Feeders & Offbearers	58	76	18	6	24
All Other Freight & Material Movers, Hand	120	153	33	9	42
Hand Packers & Packagers	38	50	12	3	15
Vehicle Washers & Equipment Cleaners	339	444	105	39	144
All Other Helpers & Laborers	187	240	53	16	69
TOTAL ALL OCCUPATIONS	47,372	59,243	11,871	7,526	19,397

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Management Support Workers
Management Analysts

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineers
Mining Engineers, Incl. Mine Safety
Chemical Engineers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PIMA COUNTY (CONTD.)

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL (CONTD.)

All Other Physical Scientists
Physicists & Astronomers

All Mathematical Scientists
Operations & Systems Analysts, Exc. Computer

All Other Professional, Paraprofessional,
& Technical Workers
Librarians, Professional
Curators, Archivists, & Museum Technicians

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Investigators, Clerical
Library Assistants & Bookmobile Drivers

SERVICE OCCUPATIONS

All Other Food Service Workers
Combined Food Preparation & Service Workers

All Other Health Service Workers
Occupational Therapy Assistants & Aides

All Other Service Workers
Guides
Funeral Attendants

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Mobile Heavy Equip. Mechanics, Exc. Engines
Small Engine Specialists
Tire Repairers & Changers

All Extraction Workers, Exc. Helpers
Septic Tank Servicers & Sewer Pipe Cleaners

All Other Precision Textile & Apparel Workers
Custom Tailors & Sewers
Precision Dyers

All Precision Printing Workers
Precision Compositors/Typesetters/Arrangers

All Other Precision Workers
Precision Photographic Process Workers

All Other Printing & Related Machine Opers.
Photoengraving & Lithographing Machine Opers.

All Other Machine Operators & Tenders
Sewing Machine Operators, Non-Garment
Photographic Processing Mach. Opers. & Tenders

All Other Hand Workers
Painting, Coating, & Decorating Workers, Hand

All Other Motor Vehicle Operators
Bus Drivers, School
Driving Sales Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

FINAL COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	151	161	10	5	15
Financial Managers	11	12	1	0	1
Personnel, Training, & Labor Relations Mgrs.	7	7	0	0	0
Administrative Services Managers	10	11	1	0	1
Medicine & Health Services Managers	23	24	1	1	2
Food Service & Lodging Managers	23	25	2	2	4
General Managers & Top Executives	40	42	2	0	2
All Other Managers & Administrators	37	40	3	2	5
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	746	840	94	79	173
Accountants & Auditors	26	28	2	2	4
All Other Financial Specialists	11	12	1	1	2
All Other Management Support Workers	62	69	7	4	11
All Engineers	1	1	0	0	0
All Engineering & Related Technicians	7	8	1	0	1
All Mathematical Scientists	2	3	1	0	1
All Social Scientists	20	23	3	1	4
Social Workers, Exc. Medical & Psychiatric	27	30	3	3	6
Social Service Technicians	35	40	5	2	7
All Religious Workers	1	1	0	0	0
Lawyers	28	32	4	2	6
All Legal Assistants/Techs., Exc. Clerical	6	6	0	0	0
Teachers, Preschool & Kindergarten	23	27	4	4	8
All Other Teachers & Instructors	39	43	4	2	6
Physicians & Surgeons	31	35	4	4	8
Dentists	12	13	1	1	2
All Other Health Diagnosing/Treating Practitioners	10	11	1	1	2
All Therapists	1	1	0	0	0
Registered Nurses	140	161	21	25	46
Licensed Practical Nurses	57	64	7	10	17
Physician Assistants	10	10	0	1	1
Pharmacists	8	8	0	1	1
Medical & Clinical Laboratory Technologists	19	21	2	2	4
Medical & Clinical Laboratory Technicians	14	16	2	1	3
Dental Hygienists	10	11	1	2	3
Medical Records Technicians & Technologists	5	5	0	0	0
Radiologic Technologists	6	6	0	0	0
All Other Health Professionals, Paraprofessionals, & Technicians	43	47	4	6	10
All Other Professional, Paraprofessional, & Technical Workers	92	108	16	4	20
SALES & RELATED OCCUPATIONS	87	126	39	15	54
First Line Supervisors & Managers - Sales	11	16	5	1	6
Counter & Rental Clerks	61	94	33	12	45
Cashiers	12	13	1	2	3
All Other Sales & Related Workers	3	3	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	454	496	42	52	94
First Line Supers.-Clerical & Admin. Support	6	6	0	0	0
Hotel Desk Clerks	28	32	4	5	9
Teacher Aides & Ed. Assistants, Clerical	54	62	8	8	16
Legal Secretaries	14	16	2	3	5
Medical Secretaries	16	17	1	3	4
All Other Secretaries	86	95	9	13	22
Receptionists & Information Clerks	48	50	2	5	7
Typists	20	22	2	4	6
Bookkeeping, Accounting, & Auditing Clerks	39	41	2	3	5
Payroll & Timekeeping Clerks	5	5	0	0	0
Billing, Cost & Rate Clerks	29	31	2	3	5
General Office Clerks	23	24	1	2	3

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PINAL COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Office Machine Operators	3	3	0	0	0
All Communication Equipment Operators	4	4	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	7	7	0	0	0
All Other Material Recording/Scheduling/Dist.	3	3	0	0	0
All Other Clerical & Administrative Support	69	78	9	3	12
SERVICE OCCUPATIONS	712	816	104	122	226
Housekeepers	9	10	1	1	2
All Other Service Supervisors & Managers	9	9	0	1	1
Guards & Watch Guards	8	8	0	0	0
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	10	11	1	2	3
Bartenders	40	46	6	4	10
Waiters & Waitresses	83	97	14	18	32
Dining Room/Cafeteria Attndts. & Bartdr. Helpers	23	27	4	1	5
Cooks, Restaurant	33	38	5	4	9
Cooks, Institution or Cafeteria	20	22	2	2	4
Food Preparation Workers	61	71	10	10	20
All Other Food Service Workers	5	5	0	0	0
Dental Assistants	19	21	2	4	6
Medical Assistants	45	51	6	9	15
Nursing Aides, Orderlies, & Attendants	48	55	7	10	17
Pharmacy Assistants	6	6	0	1	1
All Other Health Service Workers	6	6	0	0	0
Maids & Housekeeping Cleaners	101	117	16	22	38
Janitors & Cleaners, Exc. Maids & Housekeeping	21	22	1	1	2
All Other Cleaning/Building Service, Exc. Private House	10	16	6	1	7
Hairdressers, Hairstylists, & Cosmetologists	60	71	11	16	27
Amusement & Recreation Attendants	20	22	2	2	4
Child Care Workers	14	16	2	3	5
All Other Service Workers	61	69	8	10	18
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	60	69	9	9	18
Gardeners & Groundskeepers, Exc. Farm	56	65	9	9	18
All Other Agri., Forestry, Fishing, & Related	4	4	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	252	281	29	12	41
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	14	15	1	1	2
All First Line Managers/Supervisors - Maintenance/Production/Construction	4	4	0	0	0
All Inspectors, Testers, & Related	1	1	0	0	0
Maintenance Repairers, General Utility	54	59	5	2	7
Automotive Mechanics	35	40	5	2	7
All Other Mechanics, Installers, & Repairers	39	45	6	2	8
All Construction Trades Workers	22	25	3	1	4
All Extraction Workers, Exc. Helpers	1	1	0	0	0
All Precision Metal Workers	2	2	0	0	0
All Precision Woodworkers	1	1	0	0	0
All Precision Textile & Apparel Workers	4	4	0	0	0
Laundry/Drycleaning Mach. Ops., Exc. Pressing	8	8	0	0	0
All Plant & System Operators	4	4	0	0	0
Bus Drivers, School	29	34	5	2	7
All Other Motor Vehicle Operators	2	2	0	0	0
All Transportation & Moving Equip. Operators	1	1	0	0	0
Freight, Stock, & Material Movers, Hand	1	1	0	0	0
All Other Helpers & Laborers	30	34	4	2	6
TOTAL ALL OCCUPATIONS	2,462	2,789	327	294	621

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

PINAL COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Financial Specialists
Tax Preparers

All Other Management Support Workers
Employment Interviewers
Personnel, Training, & Labor Rel. Specialists

All Other Social Scientists
Urban & Regional Planners

All Other Teachers & Instructors
Teachers, Elementary School
Instructors, Nonvocational Education
Instructors & Coaches, Sports & Physical Trng.

All Other Health Diagnosing/Treating
Practitioners
Optometrists

All Other Health Professionals,
Paraprofessionals, & Technicians
Opticians, Dispensing & Measuring
Dietitians & Nutritionists
Dietetic Technicians

All Other Professional, Paraprofessional,
& Technical Workers
Computer Programmers
Computer Programmer Aides
Social workers, Medical & Psychiatric
Vocational & Educational Counselors
Instructional Coordinators

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Welfare Eligibility Workers & Interviewers
File Clerks

SERVICE OCCUPATIONS

All Other Food Service Workers
Cooks, Specialty Fast Food

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

All Other Service Workers
Barbers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Automotive Body & Related Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers
Office Machine & Cash Register Servicers

All Other Construction Trades Workers
Carpenters
Septic Tank Servicers & Sewer Pipe Cleaners

All Other Helpers & Laborers
Mechanic & Repairer Helpers
Vehicle Washers & Equipment Cleaners

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

SANTA CRUZ COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	52	66	14	3	17
Financial Managers	5	6	1	0	1
Food Service & Lodging Managers	19	21	2	2	4
General Managers & Top Executives	15	19	4	0	4
All Other Managers & Administrators	13	20	7	1	8
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	165	180	15	18	33
Accountants & Auditors	14	15	1	1	2
All Other Financial Specialists	3	3	0	0	0
All Other Management Support Workers	3	3	0	0	0
All Social Scientists	1	1	0	0	0
All Religious Workers	1	1	0	0	0
All Legal Assistants/Techs., Exc. Clerical	3	3	0	0	0
All Teachers & Instructors	4	4	0	0	0
Physicians & Surgeons	12	13	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	2	2	0	0	0
All Therapists	3	3	0	0	0
Registered Nurses	68	78	10	11	21
Licensed Practical Nurses	18	20	2	4	6
All Other Health Professionals, Paraprofessionals, & Technicians	17	17	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	16	17	1	1	2
SALES & RELATED OCCUPATIONS	33	41	8	4	12
All Sales Representatives & Salespersons, Service	6	6	0	0	0
Counter & Rental Clerks	10	16	6	2	8
Cashiers	16	18	2	2	4
All Other Sales & Related Workers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	158	181	23	11	34
First Line Supers.-Clerical & Admin. Support	8	11	3	0	3
Hotel Desk Clerks	32	37	5	6	11
All Secretaries	24	24	0	1	1
Receptionists & Information Clerks	13	14	1	0	1
File Clerks	7	7	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	14	15	1	1	2
General Office Clerks	20	27	7	2	9
All Communication Equipment Operators	2	2	0	0	0
Stock Clerks - Stockroom, Warehouse, or Yard	11	15	4	0	4
All Other Material Recording/Scheduling/Dist.	3	4	1	0	1
All Other Clerical & Administrative Support	24	25	1	1	2
SERVICE OCCUPATIONS	434	506	72	54	126
Housekeepers	8	9	1	0	1
All Other Service Supervisors & Managers	6	6	0	0	0
Guards & Watch Guards	12	18	6	0	6
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	5	5	0	0	0
Bartenders	23	25	2	2	4
Waiters & Waitresses	54	62	8	11	19
Dining Room/Cafeteria Attndts. & Bartdr. Helpers	38	44	6	1	7
Cooks, Restaurant	34	39	5	4	9
Cooks, Institution or Cafeteria	6	6	0	0	0
Food Preparation Workers	26	30	4	4	8
All Other Food Service Workers	18	18	0	0	0
Medical Assistants	9	10	1	2	3
Nursing Aides, Orderlies, & Attendants	31	35	4	6	10
All Other Health Service Workers	8	8	0	1	1
Maids & Housekeeping Cleaners	77	94	17	17	34
Janitors & Cleaners, Exc. Maids & Housekeeping	38	49	11	4	15

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

SANTA CRUZ COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Other Cleaning/Building Service, Exc. Private House	6	10	4	0	4
Amusement & Recreation Attendants	15	17	2	1	3
Baggage Porters & Bellhops	10	11	1	0	1
All Other Service Workers	10	10	0	1	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	39	44	5	6	11
Gardeners & Groundskeepers, Exc. Farm	39	44	5	6	11
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	166	235	69	13	82
All First Line Managers/Supervisors - Maintenance/Production/Construction	7	9	2	0	2
All Inspectors, Testers, & Related Maintenance Repairers, General Utility	60	100	40	9	49
Automotive Mechanics	17	18	1	0	1
All Printing & Related Machine Oper.	15	17	2	1	3
Laundry/Drycleaning Mach. Oper., Exc. Pressing	4	6	2	0	2
All Other Machine Operators & Tenders	14	15	1	0	1
All Motor Vehicle Operators	5	5	0	0	0
All Freight & Material Movers, Hand	5	5	0	0	0
Hand Packers & Packagers	2	2	0	0	0
All Other Helpers & Laborers	30	50	20	3	23
	7	8	1	0	1
TOTAL ALL OCCUPATIONS	1,047	1,253	206	109	315

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Marketing, Advertising, & Public Rel. Mgrs.

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Professional, Paraprofessional,
& Technical Workers
Social Workers, Medical & Psychiatric

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Secretaries
Medical Secretaries

All Other Clerical & Administrative Support
Billing, Cost & Rate Clerks

SERVICE OCCUPATIONS

All Other Food Service Workers
Food Servers, Outside
Counter Attendants - Lunchroom, Coffee Shop,
& Cafeteria

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

All Other Service Workers
Hairdressers, Hairstylists, & Cosmetologists

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Machine Operators & Tenders
Pressing Machine Oper. - Textile & Garments

All Other Helpers & Laborers
Mechanic & Repairer Helpers

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YAVAPAI COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	185	202	17	8	25
Financial Managers	25	28	3	0	3
Administrative Services Managers	10	10	0	0	0
Medicine & Health Services Managers	13	13	0	0	0
Food Service & Lodging Managers	27	31	4	3	7
General Managers & Top Executives	72	78	6	2	8
All Other Managers & Administrators	38	42	4	3	7
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	824	934	110	96	206
Accountants & Auditors	36	40	4	4	8
All Other Financial Specialists	3	3	0	0	0
All Other Management Support Workers	14	20	6	1	7
Civil Engineers, Incl. Traffic	15	19	4	1	5
Surveying & Mapping Scientists	12	14	2	0	2
Drafters	24	29	5	1	6
All Other Engineering & Related Technicians	35	43	8	1	9
All Social Scientists	6	6	0	0	0
Social Workers, Medical & Psychiatric	25	28	3	3	6
Recreation Workers	14	16	2	0	2
All Religious Workers	2	2	0	0	0
Lawyers	26	30	4	2	6
All Legal Assistants/Techs., Exc. Clerical	4	4	0	0	0
Nursing Instructors	3	3	0	0	0
Instructors & Coaches, Sports & Physical Trng.	25	29	4	2	6
All Other Teachers & Instructors	17	18	1	0	1
Physicians & Surgeons	63	73	10	9	19
All Other Health Diagnosing & Treating Practitioners	23	25	2	2	4
Respiratory Therapists	12	13	1	1	2
All Other Therapists	5	5	0	0	0
Registered Nurses	230	265	35	43	78
Licensed Practical Nurses	52	58	6	10	16
Pharmacists	8	9	1	1	2
Medical & Clinical Laboratory Technologists	9	9	0	0	0
Medical & Clinical Laboratory Technicians	25	28	3	3	6
Dental Hygienists	29	33	4	6	10
Radiologic Technologists	15	16	1	1	2
Radiologic Technicians	10	10	0	0	0
Surgical Technicians	11	12	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	36	38	2	4	6
Funeral Directors & Morticians	8	9	1	0	1
All Other Professional, Paraprofessional, & Technical Workers	27	27	0	0	0
SALES & RELATED OCCUPATIONS	68	88	20	10	30
All Sales Representatives & Salespersons, Service	21	24	3	3	6
Counter & Rental Clerks	28	44	16	5	21
Cashiers	19	20	1	2	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	537	610	73	77	150
First Line Supers.-Clerical & Admin. Support	19	21	2	0	2
Hotel Desk Clerks	36	42	6	7	13
Legal Secretaries	30	35	5	7	12
Medical Secretaries	59	67	8	12	20
All Other Secretaries	73	85	12	10	22
Receptionists & Information Clerks	101	125	24	17	41
Typists	25	28	3	5	8
Statistical Clerks	6	6	0	1	1
Interviewing Clerks, Exc. Personnel & Welfare	7	8	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	51	55	4	6	10

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YAVAPAI COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Payroll & Timekeeping Clerks	5	5	0	0	0
Billing, Cost & Rate Clerks	28	31	3	5	8
General Office Clerks	36	38	2	3	5
Billing, Posting, & Calculating Machine Opers.	10	10	0	1	1
All Other Office Machine Operators	8	8	0	0	0
Switchboard Operators	11	12	1	1	2
Stock Clerks - Stockroom, Warehouse, or Yard	7	8	1	0	1
All Other Clerical & Administrative Support	25	26	1	1	2
SERVICE OCCUPATIONS	807	923	116	127	243
Housekeepers	10	10	0	0	0
All Service Supervisors & Managers	4	6	2	0	2
Guards & Watch Guards	17	18	1	0	1
Bartenders	39	45	6	5	11
Waiters & Waitresses	18	20	2	3	5
Food Servers, Outside	7	8	1	0	1
Cooks, Institution or Cafeteria	36	39	3	1	4
Cooks, Short Order	8	9	1	0	1
Food Preparation Workers	42	45	3	3	6
All Other Food Service Workers	17	18	1	0	1
Dental Assistants	37	43	6	10	16
Medical Assistants	19	20	1	2	3
Nursing Aides, Orderlies, & Attendants	136	157	21	29	50
Home Health Aides	40	47	7	4	11
Physical & Corrective Therapy Assists./Aides	7	7	0	1	1
Pharmacy Assistants	7	8	1	1	2
All Other Health Service Workers	3	3	0	0	0
Maids & Housekeeping Cleaners	183	213	30	42	72
Janitors & Cleaners, Exc. Maids & Housekeeping	38	41	3	1	4
Hairdressers, Hairstylists, & Cosmetologists	73	86	13	19	32
Amusement & Recreation Attendants	15	17	2	1	3
Child Care Workers	8	8	0	1	1
All Other Service Workers	43	55	12	4	16
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	45	50	5	5	10
Gardeners & Groundskeepers, Exc. Farm	36	40	4	4	8
All Other Agri., Forestry, Fishing, & Related	9	10	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	271	306	35	14	49
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	12	13	1	1	2
All First Line Managers/Supervisors - Maintenance/Production/Construction	4	4	0	0	0
Maintenance Repairers, General Utility	41	44	3	2	5
Automotive Mechanics	50	59	9	4	13
All Other Mechanics, Installers, & Repairers	16	16	0	0	0
Carpenters	6	6	0	0	0
All Other Construction & Extraction Workers, Exc. Helpers	6	7	1	0	1
All Precision Metal Workers	5	5	0	0	0
All Precision Textile & Apparel Workers	24	27	3	3	6
Laundry/Drycleaning Mach. Opers., Exc. Pressing	39	44	5	2	7
All Other Machine Operators & Tenders	3	3	0	0	0
All Hand Workers	34	38	4	1	5
All Motor Vehicle Operators	17	25	8	1	9
All Helpers & Laborers	14	15	1	0	1
TOTAL ALL OCCUPATIONS	2,737	3,113	376	337	713

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YAVAPAI COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Tax Examiners, Collectors, and Revenue Agents

All Other Engineering & Related Technicians
Civil Engineering Technicians & Technologists
Surveying & Mapping Techs.

All Social Scientists
Psychologists

All Other Teachers & Instructors
Instructors, Nonvocational Education

All Other Health Diagnosing & Treating Practitioners
Dentists

All Other Health Professionals,
Paraprofessionals & Technicians
Physician Assistants

All Other Professional, Paraprofessional,
& Technical Workers
Social Workers, Exc. Medical & Psychiatric

SALES & RELATED OCCUPATIONS

All Other Sales Representatives &
Salespersons, Service
Sales Agents, Selected Business Services

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Clerical & Administrative Support
Teacher Aides & Ed. Assistants, Clerical

SERVICE OCCUPATIONS

All Other Food Service Workers
Butchers & Meat Cutters

All Other Health Service Workers
Home Health Aides
Physical & Corrective Therapy Assists./Aides

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS

All Other Agri., Forestry, Fishing, & Related
Workers
Animal Caretakers, Exc. Farm

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers
Locksmiths & Safe Repairers

All Other Precision Metal Workers
Machinists

All Other Precision Textile & Apparel Workers
Custom Tailors & Sewers
Spotters, Dry Cleaning
Pressers, Delicate Fabrics

All Other Hand Workers
Welders & Cutters
Pressers, Hand

All Other Motor Vehicle Operators
Truck Drivers, Light - Incl. Delivery & Route

All Other Helpers & Laborers
Mechanic & Repairer Helpers
Vehicle Washers & Equipment Cleaners

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YUMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	189	223	34	7	41
Financial Managers	28	30	2	0	2
Administrative Services Managers	10	14	4	0	4
Medicine & Health Services Managers	15	15	0	0	0
Food Service & Lodging Managers	24	27	3	2	5
General Managers & Top Executives	78	89	11	2	13
All Other Managers & Administrators	34	48	14	3	17
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1,042	1,194	152	129	281
Tax Preparers	15	17	2	2	4
Accountants & Auditors	47	57	10	5	15
All Other Financial Specialists	4	6	2	0	2
Personnel, Training, & Labor Rel. Specialists	6	6	0	0	0
All Other Management Support Workers	24	27	3	2	5
All Engineers	12	14	2	1	3
Drafters	18	21	3	1	4
All Other Engineering & Related Technicians	45	52	7	2	9
All Life Scientists	3	3	0	0	0
Systems Analysts, Electronic Data Processing	9	13	4	0	4
All Social Scientists	3	3	0	0	0
Social Workers, Medical & Psychiatric	11	12	1	1	2
Social Service Technicians	13	14	1	0	1
All Religious Workers	3	3	0	0	0
Lawyers	47	55	8	5	13
All Legal Assistants/Techs., Exc. Clerical	9	9	0	0	0
Teachers, Preschool & Kindergarten	21	24	3	3	6
All Other Teachers & Instructors	27	29	2	0	2
Physicians & Surgeons	63	72	9	8	17
Dentists	17	19	2	1	3
All Other Health Diagnosing & Treating					
Practitioners	3	3	0	0	0
Respiratory Therapists	8	9	1	1	2
All Other Therapists	10	11	1	1	2
Registered Nurses	204	235	31	37	68
Licensed Practical Nurses	152	174	22	32	54
Physician Assistants	14	15	1	2	3
Dietitians & Nutritionists	6	6	0	0	0
Medical & Clinical Laboratory Technologists	34	39	5	6	11
Medical & Clinical Laboratory Technicians	13	14	1	1	2
Medical Records Technicians & Technologists	20	23	3	5	8
Radiologic Technologists	13	14	1	1	2
Radiologic Technicians	18	20	2	2	4
Surgical Technicians	7	8	1	1	2
All Other Health Professionals, Paraprofessionals, & Technicians	50	52	2	6	8
All Other Professional, Paraprofessional, & Technical Workers	93	115	22	3	25
SALES & RELATED OCCUPATIONS	91	104	13	7	20
First Line Supervisors & Managers - Sales	14	15	1	0	1
All Sales Representatives &					
Salespersons, Service	4	5	1	0	1
Salespersons, Parts	6	7	1	0	1
Counter & Rental Clerks	27	34	7	5	12
Cashiers	29	30	1	2	3
All Other Sales & Related Workers	11	13	2	0	2
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	740	865	125	100	225
First Line Supers.-Clerical & Admin. Support	58	70	12	6	18
Hotel Desk Clerks	40	47	7	8	15
Legal Secretaries	39	46	7	9	16

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YUMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Medical Secretaries	22	23	1	2	3
All Other Secretaries	64	74	10	7	17
Receptionists & Information Clerks	72	79	7	10	17
Typists	27	34	7	3	10
Typists, Word Processing Equipment	12	12	0	0	0
Personnel Clerks, Exc. Payroll & Timekeeping	9	10	1	2	3
Statistical Clerks	9	10	1	1	2
Interviewing Clerks, Exc. Personnel & Welfare	12	13	1	1	2
Bookkeeping, Accounting, & Auditing Clerks	73	82	9	7	16
Payroll & Timekeeping Clerks	9	11	2	0	2
Billing, Cost & Rate Clerks	59	67	8	12	20
General Office Clerks	111	131	20	19	39
Computer Operators, Exc. Peripheral Equipment	5	5	0	0	0
Data Entry Keyers, Exc. Composing	9	9	0	0	0
All Other Office Machine Operators	1	1	0	0	0
Switchboard Operators	34	51	17	9	26
All Material Recording/Scheduling/Dist.	23	25	2	2	4
All Other Clerical & Administrative Support	52	65	13	2	15
SERVICE OCCUPATIONS	1,158	1,411	253	185	438
First Line Supers. & Mgrs./Supers. - Service	5	5	0	1	1
Housekeepers	13	14	1	1	2
All Other Service Supervisors & Managers	5	5	0	0	0
Guards & Watch Guards	114	183	69	6	75
All Other Protective Service Workers	24	40	16	4	20
Hosts/Hostesses - Restaurant/Lounge/Coffee Shop	9	10	1	1	2
Bartenders	41	46	5	5	10
Waiters & Waitresses	88	102	14	18	32
Dining Room/Cafeteria Attends. & Bartdr. Helpers	19	21	2	0	2
Cooks, Restaurant	27	31	4	3	7
Cooks, Institution or Cafeteria	18	19	1	1	2
Food Preparation Workers	76	88	12	12	24
All Other Food Service Workers	8	8	0	0	0
Dental Assistants	21	24	3	5	8
Medical Assistants	25	28	3	4	7
Nursing Aides, Orderlies, & Attendants	161	186	25	35	60
Physical & Corrective Therapy Assists./Aides	5	5	0	0	0
All Other Health Service Workers	38	43	5	2	7
Maids & Housekeeping Cleaners	185	215	30	42	72
Janitors & Cleaners, Exc. Maids & Housekeeping	89	119	30	12	42
All Other Cleaning/Building Service, Exc.					
Private House	14	22	8	1	9
Hairdressers, Hairstylists, & Cosmetologists	81	95	14	21	35
Amusement & Recreation Attendants	15	17	2	1	3
Ushers, Lobby Attendants, & Ticket Takers	11	12	1	1	2
Child Care Workers	25	27	2	5	7
All Other Service Workers	41	46	5	4	9
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	11	11	0	0	0
Gardeners & Groundskeepers, Exc. Farm	11	11	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	529	624	95	31	126
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	27	32	5	2	7
All First Line Managers/Supervisors - Maintenance/Production/Construction	5	5	0	0	0
All Machinery Maintenance Mechanics	2	2	0	0	0
Maintenance Repairers, General Utility	78	93	15	4	19
Automotive Mechanics	79	92	13	6	19
Automotive Body & Related Repairers	34	40	6	3	9
Bus & Truck Mechs., & Diesel Eng. Specialists	35	52	17	2	19
Electronic Home Entertainment Equip. Repairers	18	21	3	1	4

ESTIMATED EMPLOYMENT AND JOB OPENINGS

SERVICES

YUMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
All Other Mechanics, Installers, & Repairers	44	49	5	2	7
All Construction Trades Workers	4	4	0	0	0
All Precision Textile & Apparel Workers	31	34	3	1	4
Laundry/Drycleaning Mach. Opers., Exc. Pressing	38	43	5	2	7
Pressing Machine Opers. - Textile & Garments	16	18	2	2	4
Motion Picture Projectionists	7	8	1	1	2
All Other Machine Operators & Tenders	3	3	0	0	0
All Hand Workers	24	30	6	1	7
Bus Drivers	8	9	1	1	2
All Other Motor Vehicle Operators	19	20	1	0	1
All Transportation & Related Workers	4	4	0	0	0
All Material Moving Equipment Operators	3	5	2	0	2
Mechanic & Repairer Helpers	17	23	6	1	7
All Other Helpers & Laborers	33	37	4	2	6
TOTAL ALL OCCUPATIONS	3,760	4,432	672	459	1,131

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

All Other Managers & Administrators
Marketing, Advertising, & Public Rel. Mgrs.

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Engineers
Civil Engineers, Incl. Traffic

All Other Engineering & Related Technicians
Surveying & Mapping Techs.

All Other Teachers & Instructors
Instructors, Nonvocational Education
Instructors & Coaches, Sports & Physical Trng.

All Other Therapists
Physical Therapists

All Other Health Professionals,
Paraprofessionals, & Technicians
Opticians, Dispensing & Measuring
Dietetic Technicians
Dental Hygienists

All Other Professional, Paraprofessional,
& Technical Workers
Architects, Exc. Landscape & Marine
Computer Programmers
Computer Programmer Aides
Social Workers, Exc. Medical & Psychiatric
Vocational & Educational Counselors
Instructional Coordinators

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Material Recording/Scheduling/Dist.
Stock Clerks - Stockroom, Warehouse, or Yard

All Other Clerical & Administrative Support
Bill & Account Collectors
Teacher Aides & Ed. Assistants, Clerical

SERVICE OCCUPATIONS

All Other Cleaning/Building Service, Exc.
Private House
Pest Controllers & Assistants

All Other Service Workers
Barbers
Manicurists
Baggage Porters & Bellhops

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers
Camera & Photographic Equipment Repairers

All Precision Textile & Apparel Workers
Custom Tailors & Sewers
Upholsterers

All Hand Workers
Welders & Cutters

All Other Motor Vehicle Operators
Truck Drivers, Light - Incl. Delivery & Route
Driving Sales Workers

All Other Helpers & Laborers
Machine Feeders & Offbearers
Vehicle Washers & Equipment Cleaners

METHODOLOGY

Sample Selection and Response Rates

Occupational estimates for the services industry were developed from a survey of employers throughout the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 5,796 firms with a usable response rate of 78 percent. Firms responding represented 91 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total services employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey are then applied to the industry employment projections--representing the second stage of the forecasting methodology.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy.¹ The "Total Job Openings" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

¹ *Tomorrow's Manpower Needs*, Supplement No. 4, BLS, 1974, pp. 11-16.

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PHOENIX, ARIZONA 85005



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AUGUST 1986

Arizona Occupational Profile

**A Labor Market Information Publication
of the Department of Economic Security**





OCCUPATIONAL PROFILE

The value of current and accurate occupational employment information has long been recognized by job seekers, public and private administrators, and those involved in training, recruiting, and counseling. A major source of this information in Arizona is the Occupational Employment Statistics (OES) Program--a cooperative effort between Arizona and the U.S. Bureau of Labor Statistics.

This Occupational Profile is one in a series of publications produced from information developed by the Occupational Employment Statistics survey. These publications represent one of several occupational employment information delivery systems incorporating OES survey data. The survey is used to collect employment data, by county, for over 700 occupations in Arizona. From these surveys, which require the cooperation of the Arizona business community, current employment in the various occupations is determined, and from this an occupational outlook is formulated. The Occupational Profiles contain the survey findings and examine, individually, the industries of Arizona.

Surveyed industries include:

Mining	Finance, Insurance, and Real Estate
Construction	Services
Manufacturing	Hospitals
Transportation, Communications, and Public Utilities	Educational Services
Trade	Government

For further information, or to comment on any aspect of this program, please write to the address on the back cover.

INDUSTRY DESCRIPTION

Occupational employment estimates for the construction industry in Arizona are provided herein for the state and counties. Firms included in the study represent those involved in new work, additions, alterations, and repairs. Three broad types of construction activity are recognized: 1) construction of buildings by general contractors or by operative builders, 2) construction by general contractors not constructing buildings, and 3) construction by special trade contractors. Investment builders who build structures on their own account for rental are classified in the real estate industry, but establishments primarily engaged in construction on their own account for subsequent sale are classified in construction.

General building contractors are primarily engaged in the construction of dwellings, office buildings, stores, farm buildings, and other such projects. General contractors not constructing buildings (often referred to as heavy construction contractors) are primarily engaged in the construction of highways, streets, bridges, dams, and water projects.

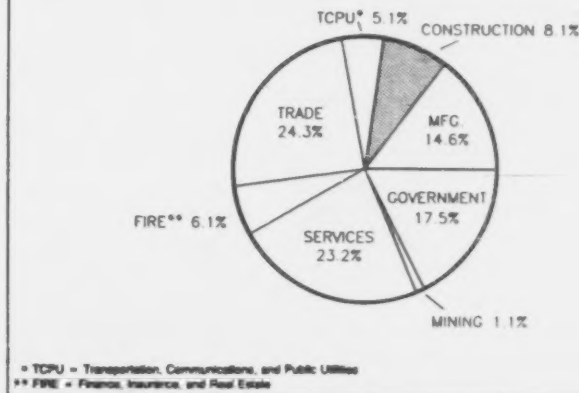
Special trade contractors are primarily engaged in specialized construction activities such as plumbing, painting, and electrical work.

A detailed description of the construction industry is provided in the *Standard Industrial Classification Manual*¹ under codes 15, 16, and 17.

INDUSTRY CHARACTERISTICS

Employment of workers earning a wage or salary in Arizona's construction industry averaged 96,000 in 1984 and represented 8 percent of Arizona's more than 1.2 million workers. Nearly two of every three workers in the industry are employed by special trade contractors--most doing masonry,

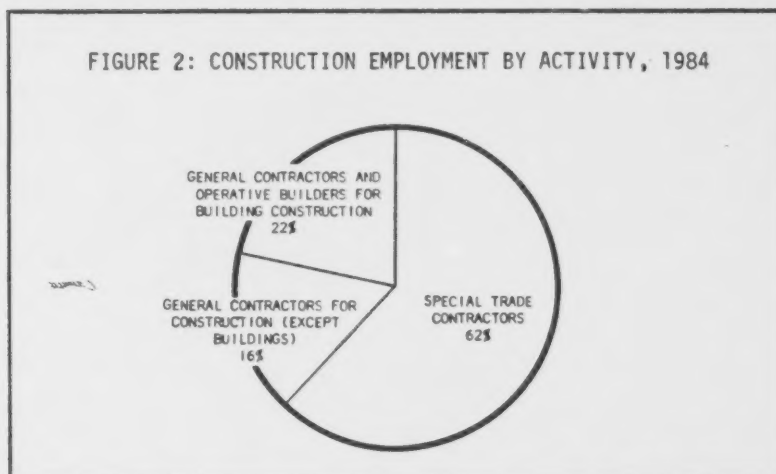
FIGURE 1: ARIZONA NONAGRICULTURAL EMPLOYMENT, 1984



¹Office of Management and Budget, *Standard Industrial Classification Manual*, 1972 Edition, pp. 45-56.

stonework, and plastering; plumbing, heating, and air conditioning; and electrical work. Special trade contractors, who work directly for the owner or on subcontract from general contractors, employed 58,000 in May 1984.

The remainder of construction employment is made up of general contractors. In 1984, 22 percent of Arizona's construction employment was with general contractors and operative builders for building construction--primarily residential housing. Of those not constructing buildings, most were involved with street and highway construction.



Construction employment is concentrated in metropolitan Phoenix (Maricopa County) and Tucson (Pima County) which account for 69 and 19 percent of the state total, respectively. The remaining 12 percent work in the nonmetropolitan counties or "balance of state."

Whereas 14 percent of construction employment in the two metropolitan counties is claimed by nonbuilding contract construction, such employment in the balance of state accounts for 30 percent of the industry. Most of this employment is involved with street and highway maintenance and construction. Due to construction of a power plant, however, construction employment in Apache County led that of all other nonmetropolitan counties in 1984.

Most construction firms employ fewer than 20, although firms involved in heavy construction tend to be larger. Ninety percent of firms engaged in building or special trade construction had fewer than 20 wage earners on their payroll and only one percent had more than 100. Of firms engaged in nonbuilding contract construction, 73 percent employed fewer than 20 and six percent had more than 100. This is compared to 86 and three percent for all industries in Arizona. The average number of construction firms with payrolls was 8,600 in 1984. According to a census of construction done by the U.S. Bureau of Census in 1982, only 40 percent of construction firms operating in the state had payrolls--the balance were single proprietorships which used only contract labor.

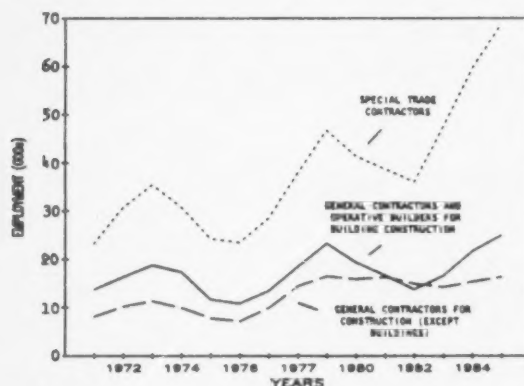
INDUSTRY TRENDS

Construction in Arizona has in recent years reached unprecedented levels of activity, with employment in the industry peaking at 111,000 in June 1985. Recovery from the effects of the 1981-82 recession has seen construction employment expand 67 percent as compared to 22 percent for total Arizona employment. Led by consumer demand, the value of building construction awards between 1982 and 1984 increased more than \$1 billion in constant dollars--with most of the value claimed by residential builders.

Buoyed by population increases that consistently rank Arizona as one of the country's fastest growing states, the construction industry employs approximately one of every 12 Arizonans earning a wage or salary. This ratio is nearly 40 percent higher than that of the U.S. and reflects the state's demand for shopping centers, highways, commercial and industrial buildings, and other facilities needed to accommodate an expanding population.

Population expansion, economic growth, and the robust nature of construction activity do not insulate employment from the cyclical swings that typify the industry. Following the high level of activity in 1979 the decline of contract construction in Arizona was more severe than in the U.S. as a whole, and local employment in construction plummeted by 25 percent between 1979 and 1982. Nationally, the decline in construction employment measured 16 percent. Suppressing demand for

FIGURE 3: ARIZONA CONSTRUCTION EMPLOYMENT, 1971-1985



housing were high mortgage rates and home prices, slower population growth, moderate employment expansion and a sufficient inventory of housing available to forestall a shortage.

Arizona's construction industry was, however, in the forefront of the state's recovery from the recession, and few analysts foresaw the degree of vigor that characterized the rebound. From a recent low of 62,800 in March 1982, employment in the industry mushroomed to nearly 90,000 by the end of the following year. Dwelling units awarded in 1983 totaled nearly 71,000--up from 38,000 in the previous year.

Such fluctuations of construction activity are especially apparent in the residential sector, which is particularly sensitive to cyclical business patterns. Less cyclical in nature are nonresidential construction of buildings and, as suggested by figure 3, nonbuilding or heavy construction, which is not necessarily tied to the ever-changing forces of the business cycle. Non-building or heavy contract construction includes construction of large projects such as electric generating facilities and water delivery systems such as the Central Arizona Project.

Since bottoming-out in 1982, construction employment rebounded with substantial gains in special trade contracting and the construction of buildings--in particular single family homes. Special trade contractors registering especially strong growth were masonry and plastering firms, roofing and siding firms, and contractors primarily involved in concrete work.

During this period both Maricopa and Pima increased their shares of Arizona construction employment while those claimed by most metropolitan counties declined. Rural counties registering the strongest employment expansion and, in fact, increasing their share of employment were Pinal and Yavapai counties.

The maturing expansion phase of the latest business cycle saw employment in the industry register surprisingly strong month-to-month increases well into 1985. As 1986 began to unfold, however, Arizona's construction industry confronted a host of conditions that will likely rein its expansion. Much of the suppressed demand of past years has been satisfied and the industry now faces high vacancy rates in both commercial buildings and multi-family housing. Layoffs had already occurred by the end of 1985 and little, if any, employment growth is expected through 1986.

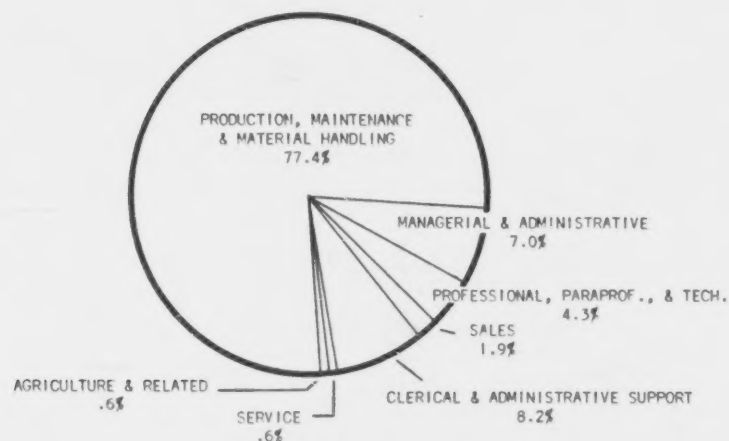
In the near term, it appears that continued population growth and relatively low interest rates will sustain residential building, while the recent sales tax increase in Maricopa County will finance new highway construction and maintain a demand for workers in heavy construction. Demographics will also continue to help sustain single-family housing as the number of persons in the 25-44 age group increases. The 35-44 age group will be expanding especially fast and will create demand for larger single-family homes targeted for trade-up home buyers. In the longer term, however, increases in construction employment will not mirror levels of construction activity. Technological developments such as the use of prefabricated walls in building construction will continue to raise output per worker. Nonetheless, employment in construction will expand 26 percent between 1984 and 1988 and will be led by contract construction of buildings which is predicted to increase 40 percent over the period. Expected to register somewhat less growth is special trade and heavy construction employment. It should be noted that the greatest portion of the projected 26 percent expansion has already occurred as the industry rebounded from the latest recession. Between 1984 and 1985, average annual employment in construction increased 14,000 or 15 percent.

OCCUPATIONAL ANALYSIS

Led by carpenters, electricians, plumbers, and other trades workers, construction employment is dominated by production and maintenance workers who represent three of every four workers in the industry. Encompassing a wide range of occupations and skill levels, workers in this category engage primarily in construction, machine operation, repair maintenance, and material handling activities. With employment of 9,100, carpenters represent the most numerically prominent occupation in the industry and are followed by electricians with 4,800.

The reader is reminded that the scope of this study includes only those workers earning a wage or salary. It is estimated, however, that one of every five construction craft workers is self-employed--most contracting with homeowners and businesses for small jobs. Self-employment is most common in paperhanging, painting, and floor covering work, although it is also found in other trades.

FIGURE 4: OCCUPATIONS IN CONSTRUCTION
MAY 1984



Trailing a distant second to production and maintenance workers is employment of clerical workers. Common to most firms, regardless of construction activities, clerical workers numbered 7,800 in May 1984, and were led by employment of secretaries and general office clerks.

Activities of firms in the industry are reflected by staffing patterns for the three broad types of construction as described on page 1. General contractors for construction of buildings, for example, employ a comparatively large share of administrative and support personnel. This is, in part, because operative builders who build on their own accounts and then sell the buildings require a more varied staff than firms that engage in construction only. In comparison, nonbuilding contract construction, and special trade construction are more dominated by production and maintenance workers. In the former, laborers and heavy equipment operators are most numerous, whereas in special trades construction, carpenters prevail.

FIGURE 5: OCCUPATIONS WITH THE GREATEST EMPLOYMENT
IN ARIZONA'S CONSTRUCTION INDUSTRY

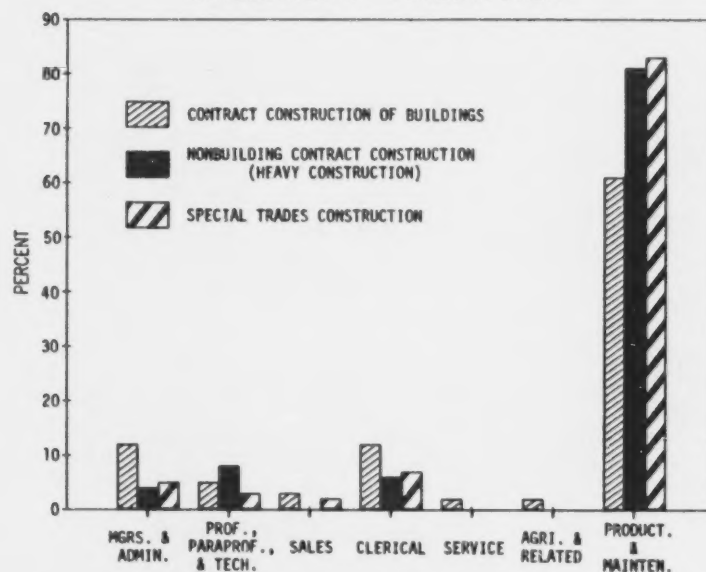
	Employment 1984	Job Openings* 1984-1988
Carpenters	9,079	3,808
Electricians	4,779	1,567
Plumbers, Pipefitters, & Steamfitters	3,875	1,343
First Line Mgrs./Suprvs.-Const. Trades & Extract.	3,759	1,430
General Managers & Top Executives	2,877	1,100
Helpers-Carpenters & Related	2,874	1,126
Concrete & Terrazzo Finishers	2,701	885
Secretaries	2,673	1,342
Painters & Paperhangers	2,548	905
Construction Managers	2,485	983
Roofers	2,475	693
Operating Engineers	2,439	936
Brick Masons	2,165	653
Drywall Installers	1,934	532
Helpers-Brick & Stone Masons	1,893	540
Heating, Air Cond., & Refrig. Mechs. & Installers	1,866	587
Bookkeeping, Accounting, & Auditing Clerks	1,795	805
Sheet Metal Workers	1,681	475
Cost Estimators	1,460	683
Tapers	1,427	469
Truck Drivers, Heavy or Tractor Trailer	1,347	446
General Office Clerks	1,345	624
Helpers, Plumbers, Pipefitters, & Steamfitters	1,305	350
Plasterers & Stucco Masons	1,195	310
Helpers-Electricians & Powerline Installers	988	327
Helpers-Painters, Paperhangers, & Plasterers	863	240
Lathers	798	215
Maintenance Repairers, General Utility	770	243
Structural Metal Workers	754	215
Financial Managers	719	257
Insulation Workers	707	170
Pipelayers	693	261
Welders & Cutters	588	202
Excavating & Loading Machine Operators	565	193
Fence Erectors	538	184

*Does not include turnover.

Looking to the future, it is obvious that Arizona's rapidly expanding population will require additional housing, hospitals, schools, recreation facilities, and other structures. Alteration and modernization of existing structures, higher personal income, and increases in spending for new industrial plants and equipment will further stimulate demand for construction workers. As mentioned earlier, of the three major categories of construction employment, contract construction of buildings is expected to realize the highest growth rates. However, because employment in special trades construction is so much larger, it will be in this category that the greatest number of job opportunities transpire. In addition to the openings created by industry growth will be many more that result from turnover and departures from the labor force--despite the fact that construction workers have a stronger attachment to their fields than do workers in general.

As mentioned, new technology is increasing productivity and redefining certain construction occupations. For example, Al Schifano, vice president, administration, at Sundt Corporation in Tucson cites the use of lasers in setting grades and plumb-lines, and the routine use of personal computers. "Computers enable contractors to price and schedule their work more effectively and to monitor costs more accurately," says Schifano, who notes that personal computers are now commonplace at job sites and field offices. As in other industries, the application of new technologies generally modifies the manner in which tasks are accomplished rather than creates new occupations.

FIGURE 6: OCCUPATIONAL EMPLOYMENT IN THE THREE MAJOR CATEGORIES OF CONSTRUCTION



Benefiting from the largest number of opportunities in construction are job aspirants with carpentry skills. During the projection period, construction firms in Arizona will create an estimated 3,800 openings for

FIGURE 7: PREDICTED GROWTH OF CONSTRUCTION TRADES OCCUPATIONS
IN THE U.S. THROUGH THE 1980s

<u>Occupation</u>	<u>Growth Rate</u>	<u>Comments</u>
Bricklayers	Faster than Average	Increased use as decorative work and in interior load bearing walls.
Stonemasons	Slower than Average	Stone is relatively expensive.
Carpenters	Average	High replacement needs because of large number employed.
Cement Masons & Terrazzo Workers	Faster than Average	Increased use of concrete and prestressed columns and beams; high replacement needs.
Drywall Installers & Finishers	Faster than Average	Opportunities especially favorable in commercial construction.
Electricians	Average	High replacement needs because of large number employed.
Floor Covering Installers	Average	Use of plywood rather than hardwood generally requires carpet or resilient floors, versatile materials.
Glaziers	Faster than Average	Increased use of glass in building construction.
Insulation Workers	Faster than Average	Increased energy consciousness.
Ironworkers	Faster than Average	Highway and bridge maintenance, and construction of buildings and power transmission towers.
Painters & Paperhangers	Average	High replacement needs because of large number employed.
Plasterers	Slower than Average	The decline in the number of plasterers has halted in recent years and may reverse because of certain advantages that plaster offers.
Plumbers & Pipefitters	Faster than Average	High replacement needs because of large number employed. Increased construction, and renovation of chemical plants, refineries, factories, and other large buildings and facilities.
Roofers	Average	
Sheet Metal Workers	Faster than Average	Replacement of existing air-conditioning systems with more efficient systems, and installation of heating equipment will boost employment.
Tilesetters	Faster than Average	Increased use in home, office, and commercial buildings because of durability and low maintenance costs.

SOURCE: Bureau of Labor Statistics

carpenters as well as 1,600 for electricians and 1,300 for plumbers, pipefitters, and steamfitters. Led by these and other construction trades workers, the production and maintenance workers category will account for three of every four openings in the industry. Despite slower employment growth for laborers and certain other production and maintenance occupations as a result of technological improvements and labor saving techniques, this broad occupational category is expected to maintain its 78 percent share of industry employment.

FIGURE 8: OCCUPATIONS WITH THE GREATEST EMPLOYMENT
IN THE THREE MAJOR CATEGORIES OF CONSTRUCTION
MAY 1984

<u>CONTRACT CONSTRUCTION OF BUILDINGS</u>		<u>NONBUILDING CONTRACT CONSTRUCTION (HEAVY CONSTRUCTION)</u>		<u>SPECIAL TRADES CONSTRUCTION</u>	
Carpenters	3,997	Laborers & Helpers, Exc. Trades	1,866	Carpenters	4,423
Carpenter's Helpers	1,944	Operating Engineers	1,574	Electricians	3,675
Laborers & Helpers, Exc. Trades	1,917	Electricians	969	Plumbers & Pipefitters	3,100
Construction Supervisors	1,442	Truck Drivers, Heavy	947	Laborers & Helpers, Exc. Trades	3,029
Construction Managers	1,162	Carpenters	659	Roofers	2,325
Secretaries	1,110	Pipelayers	633	Painters & Paperhangers	2,303
General Mgrs. & Top Execs.	924	Plumbers & Pipefitters	631	Concrete & Terrazo Finishers	1,913

The prospects for growth notwithstanding, workers employed in the various construction trades encounter varying degrees of success in weathering economic downturns, intervals between short-term projects, and the inevitable periods of depressed construction activity. For example, carpenters with diversified skills will have better opportunities than those who can only do relatively routine types of carpentry, and some electricians are able to transfer to positions as maintenance electricians in other industries. In fact, nearly one-third of Arizona's electricians are employed in industries other than construction while nationally about half are employed outside the construction industry.

Because construction trades often depend on one another--particularly on large projects--work delays or strikes in one trade can delay or stop work in another. This, in addition to work stoppages caused by inclement weather, boosts national unemployment in construction to more than twice the average for all industries.

Clerical occupations, which account for eight percent of the construction industry's employment will account for about 10 percent or 3,400 of the industry's projected 33,000 openings during the 1984-1988 period. Most of the openings will be for secretaries and bookkeeping, accounting, and auditing clerks.

Managerial and administrative occupations, which constitute construction's third largest occupational group, will generate about 2,500 openings in the four-year period. Most of these opportunities will be for general managers and top executives and construction managers.



OCCUPATIONAL STRUCTURE

The following tables provide employment estimates and projected employment and job openings for the counties and the state. Graham and Greenlee counties have been combined due to their close proximity, similar economies, and size. A table for La Paz county is not included because of limited construction employment.

When using the data, please note the following:

- 1) Construction employment growth in each of the nonmetropolitan counties reflects the rate calculated for the "balance of state" (Arizona less Maricopa and Pima counties).
- 2) The data reflect full- and part-time wage and salary employment only, and do not include self-employed or unpaid family workers.
- 3) Total job openings represent the number of openings due to growth of the industry and separations from the labor force. They do not account for labor turnover, i.e., openings created when a worker changes-jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.
- 4) To eliminate the possible disclosure of confidential employer information, occupations have been added to the appropriate "All Other" or residual category if: less than three firms reported a single occupation; one firm reported more than 50 percent of the occupational estimate; two firms combined reported more than 75 percent of the occupational estimate. In certain cases, releases have been obtained from large employers to waive the confidentiality criteria.
- 5) The projection technique does not possess the degree of accuracy that may be implied by unrounded numbers.
- 6) Data for occupations with employment of less than five are included in the appropriate "All Other" categories. These occupations are not listed, however, in the summary of "All Other" categories which follows each table.

ESTIMATED EMPLOYMENT AND JOB OPENINGS

CONSTRUCTION

STATEWIDE

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	6,449	7.0	8,234	2,481
Financial Managers	719	.8	908	257
Personnel, Training, & Labor Relations Mgrs.	23	.0	27	4
Purchasing Managers	9	.0	10	1
Marketing, Advertising, & Public Rel. Mgrs.	64	.1	83	24
Administrative Services Managers	81	.1	105	29
Construction Managers	2,485	2.7	3,211	983
General Managers & Top Executives	2,877	3.1	3,638	1,100
All Other Managers & Administrators	191	.2	252	83
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	3,897	4.3	4,946	1,517
Management Support Occupations	2,209	2.4	2,788	957
Accountants & Auditors	385	.4	488	146
Budget Analysts	35	.0	45	14
All Other Financial Specialists	21	.0	27	7
Purchasing Agents, Exc. Wholesale, Retail, & Farm	178	.2	223	60
Personnel, Training, & Labor Rel. Specialists	7	.0	7	0
Cost Estimators	1,460	1.6	1,841	683
Construction & Building Inspectors	40	.1	50	15
All Other Management Support Workers	83	.1	107	32
Engineering & Related Occupations	1,550	1.7	1,987	525
Civil Engineers, Incl. Traffic	180	.2	230	67
Electrical & Electronic Engineers	301	.3	394	110
Industrial Engineers, Exc. Safety	28	.0	37	11
Safety Engineers, Exc. Mining	23	.0	29	6
Mechanical Engineers	353	.4	459	125
All Other Engineers	134	.1	179	53
Architects, Exc. Landscape & Marine	28	.0	34	8
Landscape Architects	11	.1	14	4
Surveying & Mapping Scientists	23	.1	30	8
Civil Engineering Technicians & Technologists	15	.0	18	3
Electrical/Electronic Engineering Technicians	95	.1	117	26
Mechanical Engineering Techs.	36	.0	47	12
Drafters	293	.3	364	87
Surveying & Mapping Techs.	16	.1	19	3
All Other Engineering & Related Technicians	14	.0	16	2
Natural Scientists & Related Workers	1	.0	1	0
Computer, Math, Research, & Related Occupations	60	.1	73	13
Systems Analysts, Electronic Data Processing	24	.0	30	6
Computer Programmers	29	.0	34	5
Computer Programmer Aides	7	.1	9	2
Social Scientists/Other Social & Religious	3	.0	3	0
Health Practitioners, Techs., & Related Occupations	5	.0	6	1
Writers, Artists, Athletes, & Related	14	.0	18	4
Interior Designers	14	.0	18	4
All Other Professional, Paraprofessional, & Technical Workers	55	.1	70	17
SALES & RELATED OCCUPATIONS	1,668	1.9	2,118	688
First Line Supervisors & Manager/Supervisors	64	.1	79	21
First Line Supervisors & Managers - Sales	64	.1	79	21
Merchandise, Products & Other Sales	1,604	1.8	2,039	667
Sales Engineers	67	.1	83	16

ESTIMATED EMPLOYMENT AND JOB OPENINGS

CONSTRUCTION

STATEWIDE (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	62	.1	77	20
Other Sales Representatives, Exc. Retail	1,214	1.3	1,544	521
All Other Sales & Related Workers	261	.3	335	110
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	7,764	8.2	9,778	3,437
First Line Supervisors & Manager/Supervisors	188	.2	231	59
First Line Supers.-Clerical & Admin. Support	188	.2	231	59
Selected Secretarial & Gen. Office Occupations	6,682	7.1	8,451	3,102
Secretaries	2,673	2.9	3,419	1,342
Receptionists & Information Clerks	180	.2	227	76
Typists	183	.2	226	84
Typists, Word Processing Equipment	77	.1	94	22
Personnel Clerks, Exc. Payroll & Timekeeping	12	.0	13	1
File Clerks	38	.0	47	17
Procurement Clerks	29	.0	33	4
Bookkeeping, Accounting, & Auditing Clerks	1,795	1.9	2,264	805
Payroll & Timekeeping Clerks	321	.3	396	120
Billing, Cost, & Rate Clerks	29	.0	34	7
General Office Clerks	1,345	1.4	1,698	624
Office Machine Operators	106	.1	126	23
Billing, Posting, & Calculating Machine Opers.	15	.0	18	4
Computer Operators, Exc. Peripheral Equipment	41	.0	51	11
Data Entry Keyers, Exc. Composing	41	.0	47	6
All Other Office Machine Operators	9	.1	10	2
Communications & Message Distribution	122	.1	147	53
Switchboard Operators	122	.1	147	53
Material Distribution & Recording Occupations	528	.6	636	148
Dispatchers - Exc. Police, Fire, & Ambulance	102	.1	120	21
Production, Planning, & Expediting Clerks	42	.0	54	17
Stock Clerks - Stockroom, Warehouse, or Yard	364	.4	439	106
Traffic, Shipping, & Receiving Clerks	14	.1	17	4
All Other Material Recording/Scheduling/Dist.	6	.0	6	0
All Other Clerical & Administrative Support	138	.1	187	52
SERVICE OCCUPATIONS	646	.6	841	280
First Line Supervisors & Managers - Service	44	.0	55	16
Protective Service Occupations	168	.2	215	58
Guards & Watch Guards	131	.1	173	48
All Other Protective Service Workers	37	.1	42	10
Food & Beverage Preparation	120	.1	163	64
Cleaning & Building Services Occupations	271	.3	351	119
Janitors & Cleaners, Exc. Maids & Housekeeping	235	.3	304	102
All Other Cleaning/Building Service, Exc. Private House	36	.0	47	17
All Other Service Workers	43	.0	57	23
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	543	.6	732	283
Other Agricultural/Forestry/Fishing & Related	543	.6	732	283
Gardeners & Groundskeepers, Exc. Farm	441	.5	592	234
All Other Agri., Forestry, Fishing, & Related	102	.1	140	49

ESTIMATED EMPLOYMENT AND JOB OPENINGS

CONSTRUCTION

STATEWIDE (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	72,803	77.5	91,200	24,808
First Line Supervisors & Managers-Prod. & Rel.	3,923	4.2	5,024	1,473
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	88	.1	105	23
First Line Managers/Supervisors - Construction Trades & Extraction Workers	3,759	4.0	4,829	1,430
First Line Mgrs./Supers. - Transport. Operatives	18	.0	21	4
First Line Mgrs./Supers. - Laborers & Helpers	36	.1	44	11
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	22	.0	25	5
Inspectors & Related Occupations	272	.3	362	121
Precision Inspectors, Testers, & Graders	185	.2	246	83
Production Inspectors, Testers, & Graders	81	.1	108	36
All Other Inspectors, Testers, & Related	6	.0	8	2
Mechanics, Installers, & Repairers	4,945	5.3	5,996	1,421
Millwrights	222	.2	269	72
Machinery Maintenance Workers	60	.1	69	13
Maintenance Repairers, General Utility	770	.8	952	243
Automotive Mechanics	204	.3	244	46
Bus & Truck Mechs., & Diesel Eng. Specialists	184	.2	228	54
Mobile Heavy Equip. Mechanics, Exc. Engines	365	.4	442	89
Telephone & Cable TV Line Installers/Repairers	334	.4	404	86
Electrical Powerline Installers & Repairers	241	.3	276	52
All Other Electrical Mechs./Installers/Repairers	145	.1	169	33
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1,866	2.0	2,286	587
Elevator Installers & Repairers	45	.0	53	12
Riggers	72	.2	78	13
Installers/Repairers - Manufactured Buildings	39	.0	47	8
All Other Mechanics, Installers, & Repairers	398	.0	479	113
Construction Trades & Extraction	38,591	41.2	48,061	13,066
Carpenters	9,079	9.7	11,712	3,808
Ceiling Tile Installers/Acoustical Carpenters	211	.2	255	34
Drywall Installers	1,934	2.1	2,374	532
Tapers	1,427	1.5	1,736	469
Lathers	798	.9	960	215
Electricians	4,779	5.1	5,883	1,567
Brick Masons	2,165	2.3	2,651	653
Stone Masons	193	.2	249	69
Hard Tile Setters	471	.5	579	145
Concrete & Terrazzo Finishers	2,701	2.9	3,405	885
Reinforcing Metal Workers	276	.3	332	85
Plasterers & Stucco Masons	1,195	1.3	1,444	310
Painters & Paperhangers - Construction & Maintenance	2,548	2.7	3,137	905
Plumbers, Pipefitters, & Steamfitters	3,875	4.1	4,827	1,343
Pipelaying Fitters	110	.1	124	24
Pipelayers	693	.7	879	261
Carpet Installers	108	.1	136	33
Floor Layers, Exc. Carpet, Wood, & Hard Tiles	80	.1	99	21
Air Hammer Operators	143	.2	172	44
Paving, Surfacing, & Tamping Equip. Opers.	413	.4	514	143
Insulation Workers	707	.8	852	170
Sheet Metal Duct Installers	14	.0	16	2
Roofers	2,475	2.6	3,045	693
Glaziers	523	.6	635	157
Structural Metal Workers	754	.8	920	215
Fence Erectors	538	.6	662	184
All Other Construction Trades Workers	224	.2	279	66
Earth Drillers, Exc. Oil & Gas	100	.1	116	20
All Other Extraction Workers, Exc. Helpers	57	.1	68	13

ESTIMATED EMPLOYMENT AND JOB OPENINGS

CONSTRUCTION

STATEWIDE (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PERCENT OF MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	TOTAL JOB OPENINGS 1984-1988
Precision Production Occupations	2,017	2.2	2,451	570
Machinists	20	.0	22	2
Sheet Metal Workers	1,681	1.8	2,043	475
Boilermakers	123	.1	142	31
All Other Precision Metal Workers	1	.0	1	0
Cabinetmakers & Bench Carpenters	134	.1	175	48
All Other Precision Workers	58	.1	68	14
Machine Setters, Operatives, & Tenders	607	.5	740	177
Machine Tool Cutting Operators & Tenders - Metal & Plastic	14	.0	16	2
Metal Fabricators, Structural Metal Products	383	.4	465	109
All Other Metal & Plastic Machine Operators	5	.0	5	0
Crushing, Grinding, & Mixing Machine Operators	122	.1	149	37
All Machine Setters & Set-Up Operators	53	.0	70	23
All Other Machine Operators & Tenders	30	.0	35	6
Assemblers & Fabricators	991	1.0	1,234	326
Fitters, Structural Metal - Precision	85	.1	106	27
All Other Precision Assemblers, Metal	61	.1	78	21
Welders & Cutters	588	.6	741	202
Carpet Cutters, Diagrammers, & Seamers	45	.0	53	12
All Other Hand Workers	212	.2	256	64
Plant & System Occupations	43	0	56	17
Transportation & Material Moving Workers	5,549	5.9	7,019	1,912
Truck Drivers, Heavy or Tractor Trailer	1,347	1.4	1,708	446
Truck Drivers, Light - Incl. Delivery & Route	388	.4	472	102
All Other Motor Vehicle Operators	23	.0	27	4
All Other Transportation & Related Workers	40	.0	52	15
Excavating & Loading Machine Operators	565	.6	703	193
Dragline Operators	31	.0	36	7
Grader, Dozer, & Scraper Operators	473	.5	574	148
Hoist & Winch Operators	9	.0	9	0
Crane & Tower Operators	53	.1	63	12
Industrial Truck & Tractor Operators	114	.1	142	34
Pump Operators	46	.0	53	10
Operating Engineers	2,439	2.6	3,155	936
All Other Material Moving Equipment Operators	21	.0	25	5
Helpers, Laborers, & Material Movers, Hand	15,865	16.9	20,257	5,725
Mechanic & Repairer Helpers	84	.1	104	26
Helpers - Brick & Stone Masons	1,893	2.0	2,333	540
Helpers - Carpenters & Related	2,874	3.1	3,843	1,126
Helpers - Electricians & Powerline Installers	988	1.2	1,205	327
Helpers - Painters, Paperhangers, & Plasterers	863	.9	1,062	240
Helpers - Plumbers, Pipefitters, & Steamfitters	1,305	1.2	1,586	350
Helpers - Roofers	427	.5	528	122
Helpers - All Other Construction Trades	703	.7	884	255
Helpers - Extractive Workers	35	.0	39	4
Freight, Stock, & Material Movers, Hand	264	.3	310	67
All Other Helpers & Laborers	6,429	6.9	8,363	2,668
TOTAL OF ALL OCCUPATIONS	93,770	100.0	117,849	33,494

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Management Support Workers
Compliance Officers & Enforcement
Inspectors, Except Construction

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Office Machine Operators
Peripheral EDP Equipment Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS

CONSTRUCTION

STATEWIDE (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Electrical Mechs./Installers/Repairers
Electric Home Appliance & Power Tool Repairers

All Other Extraction Workers, Exc. Helpers
Septic Tank Servicers & Sewer Pipe Cleaners
Blasters & Explosives Workers

All Other Metal & Plastic Machine Operators
Machine Forming Operators & Tenders - Metal
& Plastic

All Other Machine Operators & Tenders
Sawing Machine Operators & Tenders
Floor Sanding Machine Operators

All Other Plant & System Operators
Stationary Engineers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

APACHE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	16	17	1	0	1
Construction Managers	13	14	1	0	1
All Other Managers & Administrators	3	3	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	20	20	0	0	0
Electrical & Electronic Engineers	6	6	0	0	0
Mechanical Engineers	6	6	0	0	0
All Other Engineers	8	8	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	20	21	1	1	2
Secretaries	14	15	1	1	2
All Communication Equipment Operators	1	1	0	0	0
All Other Clerical & Administrative Support	5	5	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,558	1,721	163	144	307
First Line Managers/Supervisors -					
Construction Trades & Extraction Workers	9	9	0	0	0
All Other First Line Managers/Supervisors -					
Maintenance/Production/Construction	5	5	0	0	0
Mobile Heavy Equip. Mechanics, Exc. Engines	34	37	3	1	4
Electrical Powerline Installers & Repairers	134	147	13	11	24
All Other Electrical Mechs./Installers/					
Repairers	39	42	3	2	5
Riggers	68	74	6	7	13
All Other Mechanics, Installers, & Repairers	78	85	7	9	16
Carpenters	260	289	29	31	60
Electricians	360	396	36	34	70
Brick Masons	55	60	5	3	8
Pipelaying Fitters	86	94	8	8	16
Pipelayers	71	78	7	8	15
Structural Metal Workers	69	75	6	5	11
All Other Construction Trades Workers	5	6	1	0	1
Boilermakers	82	90	8	9	17
Welders & Cutters	65	71	6	6	12
All Motor Vehicle Operators	7	9	2	0	2
Operating Engineers	109	126	17	9	26
Helpers - Construction Trades	9	11	2	0	2
All Other Helpers & Laborers	13	17	4	1	5
TOTAL OF ALL OCCUPATIONS	1,614	1,779	165	145	310

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineers
Civil Engineers, Incl. Traffic

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Millwrights

All Motor Vehicle Operators
Truck Drivers, Heavy or Tractor Trailer

Helpers - Construction Trades
Helpers - Carpenters & Related

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

COCHISE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	55	65	10	2	12
Financial Managers	7	8	1	0	1
Medicine & Health Services Managers	35	43	8	2	10
General Managers & Top Executives	13	14	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	25	29	4	1	5
Cost Estimators	15	17	2	1	3
All Other Management Support Workers	2	2	0	0	0
All Engineers	4	5	1	0	1
All Engineering & Related Technicians	4	5	1	0	1
SALES & RELATED OCCUPATIONS	12	14	2	1	3
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	91	105	14	9	23
Secretaries	35	42	7	5	12
Bookkeeping, Accounting, & Auditing Clerks	21	24	3	2	5
Payroll & Timekeeping Clerks	6	7	1	1	2
General Office Clerks	19	21	2	1	3
All Office Machine Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	7	8	1	0	1
All Other Clerical & Administrative Support	2	2	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	3	4	1	0	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	763	937	174	36	210
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	28	33	5	0	5
Heating, Air Conditioning, & Refrigeration					
Mechanics & Installers	33	41	8	2	10
All Other Mechanics, Installers, & Repairers	12	14	2	0	2
Carpenters	96	130	34	10	44
Drywall Installers	37	45	8	1	9
Tapers	34	41	7	3	10
Electricians	57	70	13	5	18
Brick Masons	31	38	7	1	8
Concrete & Terrazzo Finishers	56	71	15	1	16
Plasterers & Stucco Masons	26	32	6	1	7
Painters & Paperhangers - Construction &					
Maintenance	32	39	7	3	10
Plumbers, Pipefitters, & Steamfitters	36	44	8	3	11
Roofers	16	20	4	0	4
Structural Metal Workers	8	9	1	0	1
All Other Construction Trades Workers	15	16	1	0	1
All Extraction Workers, Exc. Helpers	7	7	0	0	0
Sheet Metal Workers	35	43	8	2	10
All Hand Workers	4	4	0	0	0
All Motor Vehicle Operators	1	1	0	0	0
All Material Moving Equipment Operators	4	4	0	0	0
Helpers - Brick & Stone Masons	48	59	11	1	12
Helpers - Carpenters & Related	51	63	12	0	12
Helpers - Electricians & Powerline Installers	18	22	4	2	6
Helpers - Painters, Paperhangers, & Plasterers	14	16	2	0	2
Helpers - Plumbers, Pipefitters, & Steamfitters	14	17	3	0	3
Helpers - All Other Construction Trades	25	30	5	1	6
All Other Freight & Material Movers, Hand	5	5	0	0	0
All Other Helpers & Laborers	20	23	3	0	3
TOTAL OF ALL OCCUPATIONS	949	1,154	205	49	254

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

COCHISE COUNTY (CONTD.)

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Material Recording/Scheduling/Dist.
Dispatchers - Exc. Police, Fire, & Ambulance

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Automotive Mechanics

All Other Construction Trades Workers
Glaziers

Helpers - All Other Construction Trades
Helpers - Roofers
Helpers - Extractive Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

COCONINO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	98	114	16	5	21
Financial Managers	20	21	1	0	1
Construction Managers	56	68	12	4	16
General Managers & Top Executives	22	25	3	1	4
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	26	28	2	1	3
Accountants & Auditors	6	6	0	0	0
Cost Estimators	16	18	2	1	3
All Engineers	3	3	0	0	0
All Engineering & Related Technicians	1	1	0	0	0
SALES & RELATED OCCUPATIONS	10	10	0	0	0
Sales Representatives, Exc. Retail	5	5	0	0	0
All Other Sales & Related Workers	5	5	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	96	112	16	9	25
Secretaries	38	47	9	6	15
Bookkeeping, Accounting, & Auditing Clerks	16	17	1	1	2
General Office Clerks	20	22	2	1	3
All Material Recording/Scheduling/Dist.	14	17	3	1	4
All Other Clerical & Administrative Support	8	9	1	0	1
SERVICE OCCUPATIONS	7	8	1	0	1
Janitors & Cleaners, Exc. Maids & Housekeeping	7	8	1	0	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,131	1,392	261	70	331
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	32	37	5	0	5
Maintenance Repairers, General Utility	5	5	0	0	0
Automotive Mechanics	8	9	1	0	1
Mobile Heavy Equip. Mechanics, Exc. Engines	11	11	0	0	0
All Other Mechanics, Installers, & Repairers	10	10	0	0	0
Carpenters	190	255	65	23	88
Drywall Installers	13	16	3	0	3
Electricians	62	78	16	6	22
Brick Masons	38	48	10	3	13
Concrete & Terrazzo Finishers	23	29	6	1	7
Plasterers & Stucco Masons	26	32	6	1	7
Painters & Paperhangers - Construction & Maintenance	60	77	17	7	24
Plumbers, Pipefitters, & Steamfitters	60	74	14	5	19
Roofers	52	65	13	2	15
Glaziers	10	12	2	0	2
Structural Metal Workers	14	18	4	0	4
All Other Construction Trades Workers	24	24	0	0	0
All Other Precision Metal Workers	12	13	1	0	1
All Precision Woodworkers	1	1	0	0	0
All Machine Operators & Tenders	4	4	0	0	0
Welders & Cutters	21	23	2	1	3
All Plant & System Operators	2	2	0	0	0
Truck Drivers, Heavy or Tractor Trailer	58	65	7	3	10
Truck Drivers, Light - Incl. Delivery & Route	7	7	0	0	0
Excavating & Loading Machine Operators	11	11	0	0	0
Grader, Dozer, & Scraper Operators	27	29	2	1	3
Operating Engineers	64	72	8	5	13
Helpers - Brick & Stone Masons	21	26	5	0	5
Helpers - Carpenters & Related	129	175	46	6	52
Helpers - Electricians & Powerline Installers	11	13	2	1	3
Helpers - Painters, Paperhangers, & Plasterers	28	34	6	1	7
Helpers - Plumbers, Pipefitters, & Steamfitters	20	25	5	0	5
Helpers - Roofers	15	20	5	0	5
Helpers - All Other Construction Trades	7	8	1	0	1
All Freight & Material Movers, Hand	4	4	0	0	0
All Other Helpers & Laborers	51	60	9	4	13
TOTAL OF ALL OCCUPATIONS	1,368	1,664	296	85	381

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

COCONINO COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Material Recording/Scheduling/Dist.
Dispatchers - Exc. Police, Fire, & Ambulance

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Construction Trades Workers
Pipelayers
Air Hammer Operators

All Other Precision Metal Workers
Sheet Metal Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

GILA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	55	64	9	3	12
Construction Managers	23	29	6	2	8
General Managers & Top Executives	28	31	3	1	4
All Other Managers & Administrators	4	4	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	2	2	0	0	0
All Financial Specialists	1	1	0	0	0
All Other Management Support Workers	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	22	26	4	2	6
Secretaries	9	11	2	1	3
General Office Clerks	12	14	2	1	3
All Other Clerical & Administrative Support	1	1	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	208	259	51	11	62
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	5	5	0	0	0
All Mechanics, Installers, & Repairers	10	11	1	0	1
Carpenters	51	70	19	6	25
Electricians	36	45	9	2	11
Structural Metal Workers	14	16	2	0	2
All Other Construction Trades Workers	1	1	0	0	0
All Extraction Workers, Exc. Helpers	1	1	0	0	0
Sheet Metal Workers	23	27	4	1	5
Boilermakers	5	6	1	0	1
All Motor Vehicle Operators	4	4	0	0	0
Excavating & Loading Machine Operators	5	5	0	0	0
Operating Engineers	6	6	0	0	0
All Material Moving Equipment Operators	4	4	0	0	0
Helpers - Carpenters & Related	34	47	13	2	15
Helpers - All Other Construction Trades	3	4	1	0	1
All Other Helpers & Laborers	6	7	1	0	1
TOTAL OF ALL OCCUPATIONS	287	351	64	16	80

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Mechanics, Installers, & Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
MANUFACTURING

GRAHAM & GREENLEE COUNTIES

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	8	8	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	1	1	0	0	0
SALES & RELATED OCCUPATIONS	1	1	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	6	6	0	0	0
Secretaries	2	2	0	0	0
All Other Clerical & Administrative Support	4	4	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	84	89	5	0	5
All First Line Managers/Supervisors - Maintenance/Production/Construction	6	6	0	0	0
All Electrical Mechs./Installers/Repairers	2	2	0	0	0
All Other Mechanics, Installers, & Repairers	14	15	1	0	1
Electricians	7	8	1	0	1
All Other Construction Trades Workers	14	16	2	0	2
All Precision Metal Workers	2	2	0	0	0
All Machine Operators & Tenders	2	2	0	0	0
All Motor Vehicle Operators	8	8	0	0	0
All Material Moving Equipment Operators	15	16	1	0	1
All Freight & Material Movers, Hand	1	1	0	0	0
All Helpers & Laborers	13	13	0	0	0
TOTAL OF ALL OCCUPATIONS	100	105	5	0	5

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

MANAGERIAL & ADMINISTRATIVE OCCUPATIONS

General Managers & Top Executives

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All First Line Managers/Supervisors -
Maintenance/Production/Construction
First Line Managers/Supervisors - Construction
Trades & Extraction Workers

All Other Mechanics, Installers, & Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Motor Vehicle Operators
Truck Drivers, Heavy or Tractor Trailer

All Material Moving Equipment Operators
Excavating & Loading Machine Operators
Grader, Dozer, & Scraper Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MARICOPA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	4,391	5,560	1,169	520	1,689
Financial Managers	491	620	129	55	184
Personnel, Training, & Labor Relations Mgrs.	14	16	2	0	2
Purchasing Managers	7	8	1	0	1
Marketing, Advertising, & Public Rel. Mgrs.	55	72	17	5	22
Administrative Services Managers	53	67	14	3	17
Construction Managers	1,580	2,021	441	178	619
General Managers & Top Executives	2,064	2,589	525	263	788
All Other Managers & Administrators	127	167	40	16	56
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	3,124	3,972	848	383	1,231
Accountants & Auditors	290	372	82	38	120
Budget Analysts	33	43	10	4	14
All Other Financial Specialists	18	23	5	1	6
Purchasing Agents, Exc. Wholesale, Retail, & Farm	139	173	34	13	47
Personnel, Training, & Labor Rel. Specialists	7	7	0	0	0
Cost Estimators	1,052	1,315	263	230	493
Construction & Building Inspectors	37	46	9	5	14
All Other Management Support Workers	64	83	19	7	26
Civil Engineers, Incl. Traffic	130	170	40	14	54
Electrical & Electronic Engineers	290	383	93	17	110
Safety Engineers, Exc. Mining	23	29	6	0	6
Mechanical Engineers	328	429	101	19	120
All Other Engineers	162	216	54	10	64
Architects, Exc. Landscape & Marine	27	33	6	2	8
Landscape Architects	11	14	3	1	4
Surveying & Mapping Scientists	22	29	7	1	8
Civil Engineering Technicians & Technologists	12	15	3	0	3
Electrical/Electronic Engineering Technicians	86	105	19	4	23
Drafters	213	261	48	14	62
Surveying & Mapping Techs.	14	17	3	0	3
All Other Engineering & Related Technicians	47	60	13	1	14
All Physical Scientists	1	1	0	0	0
Systems Analysts, Electronic Data Processing	19	24	5	0	5
Computer Programmers	24	29	5	0	5
Computer Programmer Aides	7	9	2	0	2
All Social Scientists	3	3	0	0	0
All Health Professionals, Paraprofessionals & Technicians	5	6	1	0	1
Interior Designers	13	17	4	0	4
All Other Professional, Paraprofessional, & Technical Workers	47	60	13	2	15
SALES & RELATED OCCUPATIONS	1,303	1,641	338	194	532
First Line Supervisors & Managers - Sales	56	69	13	6	19
Sales Engineers	52	64	12	0	12
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	48	58	10	4	14
Other Sales Representatives, Exc. Retail	935	1,176	241	153	394
All Other Sales & Related Workers	212	274	62	31	93
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	5,503	6,906	1,403	1,082	2,485
First Line Supers.-Clerical & Admin. Support	140	174	34	15	49
Secretaries	1,887	2,408	521	447	968
Receptionists & Information Clerks	135	170	35	24	59
Typists	143	179	36	36	72
Typists, Word Processing Equipment	70	87	17	5	22
Personnel Clerks, Exc. Payroll & Timekeeping	11	12	1	0	1
File Clerks	38	47	9	8	17
Procurement Clerks	23	26	3	0	3
Bookkeeping, Accounting, & Auditing Clerks	1,268	1,591	323	252	575
Payroll & Timekeeping Clerks	231	286	55	38	93
Billing, Cost & Rate Clerks	25	30	5	2	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
General Office Clerks	866	1,086	220	190	410
Billing, Posting, & Calculating Machine Opers.	8	9	1	0	1
Computer Operators, Exc. Peripheral Equipment	32	40	8	1	9
Peripheral EDP Equipment Operators	6	7	1	1	2
Data Entry Keyers, Exc. Composing	37	43	6	0	6
All Other Office Machine Operators	3	3	0	0	0
Switchboard Operators	115	140	25	28	53
Dispatchers - Exc. Police, Fire, & Ambulance	67	79	12	2	14
Production, Planning, & Expediting Clerks	36	46	10	5	15
Stock Clerks - Stockroom, Warehouse, or Yard	267	320	53	25	78
Traffic, Shipping, & Receiving Clerks	13	16	3	1	4
All Other Material Recording/Scheduling/Dist.	4	4	0	0	0
All Other Clerical & Administrative Support	78	103	25	2	27
SERVICE OCCUPATIONS	507	667	160	73	233
First Line Supers. & Mgrs./Supers. - Service	36	46	10	5	15
Guards & Watch Guards	108	143	35	5	40
All Other Protective Service Workers	28	32	4	3	7
Food & Beverage Service Occupations	120	163	43	21	64
Janitors & Cleaners, Exc. Maids & Housekeeping	140	183	43	24	67
All Other Cleaning/Building Service, Exc. Private House	32	43	11	6	17
All Other Service Workers	43	57	14	9	23
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	426	570	144	76	220
Gardeners & Groundskeepers, Exc. Farm	337	449	112	66	178
All Other Agri., Forestry, Fishing, & Related	89	121	32	10	42
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	51,094	63,191	12,097	4,685	16,782
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	70	84	14	6	20
First Line Managers/Supervisors - Construction Trades & Extraction Workers	2,780	3,551	771	284	1,055
First Line Mgrs./Supers. - Transport. Operatives	13	16	3	1	4
First Line Mgrs./Supers. - Laborers & Helpers	29	37	8	3	11
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	9	10	1	1	2
All Inspectors, Testers, & Related	271	361	90	31	121
Millwrights	125	162	37	15	52
Machinery Maintenance Workers	41	48	7	3	10
Maintenance Repairers, General Utility	616	755	139	52	191
Automotive Mechanics	134	162	28	6	34
Bus & Truck Mechs., & Diesel Eng. Specialists	126	160	34	8	42
Mobile Heavy Equip. Mechanics, Exc. Engines	190	241	51	8	59
Telephone & Cable TV Line Installers/Repairers	282	344	62	16	78
All Other Electrical Mechs./Installers/Repairers	107	125	18	6	24
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	1,209	1,438	229	111	340
Installers/Repairers - Manufactured Buildings	24	28	4	0	4
All Other Mechanics, Installers, & Repairers	359	424	65	29	94
Carpenters	6,398	8,074	1,676	841	2,517
Ceiling Tile Installers/Acoustical Carpenters	165	196	31	9	40
Drywall Installers	1,344	1,609	265	66	331
Tapers	1,074	1,282	208	123	331
Lathers	670	796	126	47	173
Electricians	3,281	4,006	725	324	1,049
Brick Masons	1,612	1,944	332	130	462
Stone Masons	78	94	16	5	21
Hard Tile Setters	340	406	66	27	93
Concrete & Terrazzo Finishers	1,956	2,419	463	137	600
Reinforcing Metal Workers	239	286	47	26	73
Plasterers & Stucco Masons	976	1,163	187	53	240
Painters & Paperhangers - Construction & Maintenance	1,860	2,239	379	235	614

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MARICOPA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Plumbers, Pipefitters, & Steamfitters	2,892	3,546	654	297	951
Pipelaying Fitters	24	30	6	2	8
Pipelayers	477	629	152	55	207
Carpet Installers	47	56	9	2	11
Floor Layers, Exc. Carpet, Wood, & Hard Tiles	40	47	7	1	8
Air Hammer Operators	84	101	17	9	26
Paving, Surfacing, & Tamping Equip. Oper.	271	335	64	29	93
Insulation Workers	577	686	109	22	131
Roofers	1,777	2,132	355	93	448
Glaziers	368	438	70	35	105
Structural Metal Workers	530	645	115	38	153
Fence Erectors	374	449	75	42	117
All Other Construction Trades Workers	213	264	51	11	62
Earth Drillers, Exc. Oil & Gas	56	65	9	3	12
All Other Extraction Workers, Exc. Helpers	51	60	9	2	11
Machinists	12	13	1	0	1
Sheet Metal Workers	1,210	1,439	229	84	313
Boilermakers	36	46	10	3	13
All Other Precision Metal Workers	1	1	0	0	0
Cabinetmakers & Bench Carpenters	88	116	28	6	34
All Other Precision Workers	58	68	10	4	14
Machine Tool Cutting Operators & Tenders - Metal & Plastic	14	16	2	0	2
Metal Fabricators, Structural Metal Products	301	357	56	22	78
All Other Metal & Plastic Machine Operators	5	5	0	0	0
Crushing, Grinding, & Mixing Machine Operators	77	94	17	7	24
All Other Machine Operators & Tenders	24	27	3	1	4
Fitters, Structural Metal - Precision	32	37	5	2	7
All Other Precision Assemblers, Metal	46	58	12	3	15
Welders & Cutters	437	568	131	39	170
All Other Hand Workers	186	218	32	18	50
All Plant & System Operators	39	52	13	4	17
Truck Drivers, Heavy or Tractor Trailer	787	1,025	238	56	294
Truck Drivers, Light - Incl. Delivery & Route	267	323	56	15	71
All Other Motor Vehicle Operators	23	27	4	0	4
All Other Transportation & Related Workers	32	43	11	3	14
Excavating & Loading Machine Operators	421	536	115	47	162
Dragline Operators	14	16	2	1	3
Grader, Dozer, & Scraper Operators	278	347	69	32	101
Crane & Tower Operators	44	53	9	2	11
Industrial Truck & Tractor Operators	83	106	23	5	28
Pump Operators	38	44	6	3	9
Operating Engineers	1,592	2,092	500	151	651
All Other Material Moving Equipment Operators	5	5	0	0	0
Mechanic & Repairer Helpers	76	96	20	6	26
Helpers - Brick & Stone Masons	1,368	1,654	286	77	363
Helpers - Carpenters & Related	1,912	2,514	602	110	712
Helpers - Electricians & Powerline Installers	797	959	162	90	252
Helpers - Painters, Paperhangers, & Plasterers	575	691	116	31	147
Helpers - Plumbers, Pipefitters, & Steamfitters	1,046	1,252	206	59	265
Helpers - Roofers	269	320	51	15	66
Helpers - All Other Construction Trades	487	599	112	54	166
Freight, Stock, & Material Movers, Hand	210	247	37	20	57
All Other Helpers & Laborers	4,045	5,184	1,139	471	1,610
TOTAL OF ALL OCCUPATIONS	66,348	82,507	16,159	7,013	23,172

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineers
Industrial Engineers, Exc. Safety

All Other Engineering & Related Technicians
Mechanical Engineering Techs.

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MARICOPA COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Inspectors, Testers, & Related
Precision Inspectors, Testers, & Graders
Production Inspectors, Testers, & Graders

All Other Electrical Mechs./Installers/Repairers
Electrical Powerline Installers & Repairers

All Other Mechanics, Installers, & Repairers
Elevator Installers & Repairers

All Other Extraction Workers, Exc. Helpers
Septic Tank Servicers & Sewer Pipe Cleaners
Floor Sanding Machine Operators
Blasters & Explosives Workers

All Other Metal & Plastic Machine Operators
Machine Forming Operators & Tenders - Metal
& Plastic

All Other Hand Workers
Carpet Cutters, Diagrammers, & Seamers

All Plant & System Operators
Stationary Engineers

All Other Material Moving Equipment Operators
Hoist & Winch Operators

All Other Helpers & Laborers
Helpers - Extractive Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MOHAVE COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	97	113	16	5	21
Construction Managers	43	52	9	2	11
General Managers & Top Executives	44	49	5	3	8
All Other Managers & Administrators	10	12	2	0	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	12	12	0	0	0
Cost Estimators	8	8	0	0	0
All Other Management Support Workers	2	2	0	0	0
All Engineering & Related Technicians	2	2	0	0	0
SALES & RELATED OCCUPATIONS	21	25	4	2	6
Sales Representatives, Exc. Retail	21	25	4	2	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	128	151	23	17	40
Secretaries	67	79	12	10	22
Bookkeeping, Accounting, & Auditing Clerks	16	19	3	2	5
General Office Clerks	29	34	5	4	9
Stock Clerks - Stockroom, Warehouse, or Yard	14	17	3	1	4
All Other Clerical & Administrative Support	2	2	0	0	0
SERVICE OCCUPATIONS	4	5	1	0	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	885	1,075	190	44	234
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	38	43	5	0	5
Mobile Heavy Equip. Mechanics, Exc. Engines	9	9	0	0	0
All Electrical Mechs./Installers/Repairers	15	16	1	0	1
Heating, Air Conditioning, & Refrigeration					
Mechanics & Installers	71	86	15	5	20
All Other Mechanics, Installers, & Repairers	19	22	3	1	4
Carpenters	78	105	27	9	36
Drywall Installers	101	125	24	5	29
Tapers	34	41	7	3	10
Lathers	13	16	3	0	3
Electricians	44	52	8	2	10
Concrete & Terrazzo Finishers	45	57	12	2	14
Painters & Paperhangers - Construction &					
Maintenance	23	29	6	2	8
Plumbers, Pipefitters, & Steamfitters	58	72	14	6	20
All Other Construction Trades Workers	82	99	17	3	20
All Extraction Workers, Exc. Helpers	1	1	0	0	0
All Precision Metal Workers	14	17	3	1	4
All Precision Woodworkers	7	9	2	0	2
Solderers & Brazers	8	9	1	0	1
All Other Hand Workers	2	2	0	0	0
Truck Drivers, Heavy or Tractor Trailer	25	28	3	0	3
All Other Motor Vehicle Operators	8	9	1	0	1
Excavating & Loading Machine Operators	9	9	0	0	0
Operating Engineers	37	44	7	1	8
All Other Material Moving Equipment Operators	6	6	0	0	0
Helpers - Carpenters & Related	42	56	14	1	15
Helpers - Painters, Paperhangers, & Plasterers	23	28	5	0	5
Helpers - Plumbers, Pipefitters, & Steamfitters	11	13	2	0	2
Helpers - All Other Construction Trades	9	9	0	0	0
All Freight & Material Movers, Hand	5	6	1	0	1
All Other Helpers & Laborers	48	57	9	3	12
TOTAL OF ALL OCCUPATIONS	1,147	1,381	234	68	302

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

MOHAVE COUNTY (CONTD.)

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Electrical Mechs./Installers/Repairers
Telephone & Cable TV Line Installers/Repairers
Electrical Powerline Installers & Repairers

All Other Mechanics, Installers, & Repairers
Millwrights
Maintenance Repairers, General Utility

All Other Construction Trades Workers
Brick Masons
Plasterers & Stucco Masons
Insulation Workers
Roofers
Glaziers
Fence Erectors

All Precision Metal Workers
Sheet Metal Workers
Fitters, Structural Metal - Precision

All Precision Woodworkers
Cabinetmakers & Bench Carpenters

All Other Precision Assemblers, Metal

All Other Motor Vehicle Operators
Truck Drivers, Light - Incl. Delivery & Route

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

NAVAJO COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	69	81	12	2	14
Construction Managers	27	32	5	1	6
General Managers & Top Executives	38	44	6	1	7
All Other Managers & Administrators	4	5	1	0	1
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	8	9	1	0	1
All Financial Specialists	4	5	1	0	1
All Engineers	4	4	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	49	56	7	4	11
Secretaries	10	10	0	0	0
Bookkeeping, Accounting, & Auditing Clerks	21	27	6	3	9
General Office Clerks	16	17	1	1	2
All Other Clerical & Administrative Support	2	2	0	0	0
SERVICE OCCUPATIONS	4	5	1	0	1
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	548	676	128	31	159
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	14	16	2	0	2
All Electrical Mechs./Installers/Repairers	6	6	0	0	0
All Other Mechanics, Installers, & Repairers	38	42	4	1	5
Carpenters	81	111	30	9	39
Electricians	23	28	5	2	7
Brick Masons	6	7	1	0	1
Concrete & Terrazzo Finishers	11	12	1	0	1
All Other Construction Trades Workers	63	74	11	1	12
All Precision Metal Workers	6	7	1	0	1
All Machine Operators & Tenders	3	3	0	0	0
All Hand Workers	1	1	0	0	0
Truck Drivers, Heavy or Tractor Trailer	70	80	10	3	13
Operating Engineers	83	103	20	6	26
All Other Material Moving Equipment Operators	3	3	0	0	0
Helpers - Carpenters & Related	57	78	21	3	24
Helpers - All Other Construction Trades	11	13	2	0	2
All Other Helpers & Laborers	72	92	20	6	26
TOTAL OF ALL OCCUPATIONS	678	827	149	37	186

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Electrical Mechs./Installers/Repairers
Telephone & Cable TV Line Installers/Repairers

All Precision Metal Workers
Sheet Metal Workers

All Other Mechanics, Installers, & Repairers
Maintenance Repairers, General Utility
Automotive Mechanics
Mobile Heavy Equip. Mechanics, Exc. Engines
Installers/Repairers - Manufactured Buildings

Helpers - All Other Construction Trades
Helpers - Brick & Stone Masons

All Other Construction Trades Workers
Drywall Installers
Tapers
Plumbers, Pipefitters, & Steamfitters
Roofers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

PIMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	1,331	1,821	490	144	634
Financial Managers	138	186	48	12	60
Personnel, Training, & Labor Relations Mgrs.	8	10	2	0	2
Marketing, Advertising, & Public Rel. Mgrs.	9	11	2	0	2
Administrative Services Managers	27	37	10	2	12
Construction Managers	586	805	219	63	282
General Managers & Top Executives	522	716	194	63	257
All Other Managers & Administrators	41	56	15	4	19
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	577	759	182	79	261
Accountants & Auditors	63	82	19	5	24
All Other Financial Specialists	5	6	1	0	1
Purchasing Agents, Exc. Wholesale, Retail, & Farm	37	48	11	2	13
Cost Estimators	316	423	107	66	173
All Other Management Support Workers	20	26	6	1	7
Civil Engineers, Incl. Traffic	25	33	8	3	11
Mechanical Engineers	17	22	5	0	5
All Other Engineers	2	2	0	0	0
Drafters	58	77	19	2	21
All Other Engineering & Related Technicians	15	18	3	0	3
Systems Analysts, Electronic Data Processing	5	6	1	0	1
Computer Programmers	5	5	0	0	0
All Other Professional, Paraprofessional, & Technical Workers	9	11	2	0	2
SALES & RELATED OCCUPATIONS	293	394	101	39	140
First Line Supervisors & Managers - Sales	7	9	2	0	2
Sales Engineers	11	15	4	0	4
Sales Representatives, Scientific & Related Products & Services, Exc. Retail	14	19	5	1	6
Other Sales Representatives, Exc. Retail	232	313	81	34	115
All Other Sales & Related Workers	29	38	9	4	13
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	1,545	2,053	508	275	783
First Line Supers.-Clerical & Admin. Support	41	50	9	1	10
Secretaries	489	664	175	113	288
Receptionists & Information Clerks	43	55	12	5	17
Typists	32	38	6	5	11
Typists, Word Processing Equipment	5	5	0	0	0
Procurement Clerks	6	7	1	0	1
Bookkeeping, Accounting, & Auditing Clerks	365	488	123	70	193
Payroll & Timekeeping Clerks	64	82	18	6	24
General Office Clerks	316	429	113	68	181
Computer Operators, Exc. Peripheral Equipment	9	11	2	0	2
All Other Office Machine Operators	10	12	2	1	3
Switchboard Operators	6	6	0	0	0
Dispatchers - Exc. Police, Fire, & Ambulance	16	18	2	0	2
Production, Planning, & Expediting Clerks	6	8	2	0	2
Stock Clerks - Stockroom, Warehouse, or Yard	70	89	19	5	24
All Other Material Recording/Scheduling/Dist.	3	3	0	0	0
All Other Clerical & Administrative Support	64	88	24	1	25
SERVICE OCCUPATIONS	80	104	24	7	31
First Line Supers. & Mgrs./Supers. - Service	8	9	1	0	1
Guards & Watch Guards	23	30	7	1	8
All Other Protective Service Workers	2	2	0	1	1
Janitors & Cleaners, Exc. Maids & Housekeeping	46	62	16	5	21
All Other Cleaning/Building Service, Exc.	1	1	0	0	0
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	88	125	37	14	51
Gardeners & Groundskeepers, Exc. Farm	75	106	31	13	44
All Other Agri., Forestry, Fishing, & Related	13	19	6	1	7

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	14,020	18,762	4,742	1,261	6,003
First Line Managers/Supervisors - Mechanics/ Installers/Repairers	14	17	3	0	3
First Line Managers/Supervisors - Construction Trades & Extraction Workers	741	1,007	266	73	339
First Line Mgrs./Supers. - Laborers & Helpers	7	7	0	0	0
All Other First Line Managers/Supervisors - Maintenance/Production/Construction	13	15	2	1	3
All Inspectors, Testers, & Related	1	1	0	0	0
Machinery Maintenance Workers	14	16	2	1	3
Maintenance Repairers, General Utility	119	159	40	8	48
Automotive Mechanics	40	49	9	0	9
Bus & Truck Mechs., & Diesel Eng. Specialists	41	50	9	2	11
Mobile Heavy Equip. Mechanics, Exc. Engines	90	110	20	3	23
Telephone & Cable TV Line Installers/Repairers	30	37	7	0	7
Electrical Powerline Installers & Repairers	72	89	17	5	22
All Other Electrical Mechs./Installers/Repairers	24	31	7	2	9
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	414	552	138	39	177
All Other Mechanics, Installers, & Repairers	81	106	25	6	31
Carpenters	1,492	2,092	600	198	798
Ceiling Tile Installers/Acoustical Carpenters	35	46	11	1	12
Drywall Installers	343	457	114	17	131
Tapers	240	319	79	28	107
Lathers	92	122	30	6	36
Electricians	788	1,051	263	77	340
Brick Masons	308	411	103	24	127
Stone Masons	115	155	40	8	48
Hard Tile Setters	131	173	42	10	52
Concrete & Terrazzo Finishers	552	744	192	39	231
Plasterers & Stucco Masons	138	183	45	6	51
Painters & Paperhangers - Construction & Maintenance	458	612	154	58	212
Plumbers, Pipefitters, & Steamfitters	727	967	240	74	314
Pipelayers	109	133	24	11	35
Carpet Installers	58	77	19	3	22
Floor Layers, Exc. Carpet, Wood, & Hard Tiles	37	49	12	1	13
Air Hammer Operators	52	64	12	6	18
Paving, Surfacing, & Tamping Equip. Oper.	129	166	37	13	50
Insulation Workers	67	89	22	2	24
Sheet Metal Duct Installers	7	9	2	0	2
Roofers	523	700	177	26	203
Glaziers	88	117	29	8	37
Structural Metal Workers	84	114	30	5	35
Fence Erectors	136	181	45	16	61
All Other Construction Trades Workers	28	37	9	2	11
Earth Drillers, Exc. Oil & Gas	25	31	6	1	7
All Other Extraction Workers, Exc. Helpers	6	8	2	0	2
Sheet Metal Workers	308	409	101	22	123
Cabinetmakers & Bench Carpenters	26	34	8	1	9
Metal Fabricators, Structural Metal Products	80	106	26	5	31
Crushing, Grinding, & Mixing Machine Operators	36	46	10	3	13
All Machine Setters & Set-Up Operators	53	70	17	6	23
All Other Machine Operators & Tenders	6	8	2	0	2
Fitters, Structural Metal - Precision	45	60	15	4	19
All Other Precision Assemblers, Metal	15	20	5	1	6
Welders & Cutters	53	66	13	3	16
All Other Hand Workers	69	89	20	6	26
Truck Drivers, Heavy or Tractor Trailer	331	427	96	22	118
Truck Drivers, Light - Incl. Delivery & Route	85	110	25	3	28
All Other Transportation & Related Workers	8	9	1	0	1
Excavating & Loading Machine Operators	80	100	20	7	27
Grader, Dozer, & Scraper Operators	130	158	28	14	42
Crane & Tower Operators	9	10	1	0	1

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

PIMA COUNTY (CONTD.)

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
Industrial Truck & Tractor Operators	28	33	5	1	6
Operating Engineers	434	573	139	41	180
All Other Material Moving Equipment Operators	42	49	7	2	9
Helpers - Brick & Stone Masons	327	437	110	18	128
Helpers - Carpenters & Related	545	771	226	31	257
Helpers - Electricians & Powerline Installers	140	186	46	16	62
Helpers - Painters, Paperhangers, & Plasterers	203	269	66	9	75
Helpers - Plumbers, Pipefitters, & Steamfitters	194	256	62	10	72
Helpers - Roofers	121	164	43	6	49
Helpers - All Other Construction Trades	185	249	64	19	83
Freight, Stock, & Material Movers, Hand	33	41	8	1	9
All Other Helpers & Laborers	1,965	2,659	694	230	924
TOTAL OF ALL OCCUPATIONS	17,934	24,018	6,084	1,819	7,903

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Other Engineering & Related Technicians
Electrical/Electronic Engineering Technicians

CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS

All Other Office Machine Operators
Billing, Posting, & Calculating Machine Opers.

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Electrical Mechs./Installers/Repairers
Electric Home Appliance & Power Tool Repairers

All Other Mechanics, Installers, & Repairers
Millwrights
Installers/Repairers - Manufactured Buildings

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Other Construction Trades Workers
Reinforcing Metal Workers

All Other Extraction Workers, Exc. Helpers
Blasters & Explosives Workers

All Other Machine Operators & Tenders
Sawing Machine Operators & Tenders

All Other Material Moving Equipment Operators
Dragline Operators

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

PINAL COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	82	97	15	3	18
Financial Managers	10	11	1	0	1
Construction Managers	32	40	8	1	9
General Managers & Top Executives	22	24	2	0	2
All Other Managers & Administrators	18	22	4	2	6
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	17	18	1	0	1
Cost Estimators	7	7	0	0	0
All Other Management Support Workers	2	2	0	0	0
All Engineers	2	2	0	0	0
All Engineering & Related Technicians	6	7	1	0	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	59	64	5	3	8
Secretaries	28	31	3	2	5
Bookkeeping, Accounting, & Auditing Clerks	18	20	2	1	3
General Office Clerks	11	11	0	0	0
All Other Clerical & Administrative Support	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	472	575	103	32	135
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	14	14	0	0	0
All Electrical Mechs./Installers/Repairers	6	7	1	0	1
All Other Mechanics, Installers, & Repairers	12	13	1	0	1
Carpenters	107	143	36	13	49
Electricians	10	12	2	1	3
Brick Masons	6	6	0	0	0
Roofers	10	11	1	0	1
All Other Construction Trades Workers	88	104	16	6	22
All Extraction Workers, Exc. Helpers	11	12	1	0	1
All Precision Metal Workers	7	8	1	0	1
All Hand Workers	1	1	0	0	0
Truck Drivers, Heavy or Tractor Trailer	27	29	2	1	3
Excavating & Loading Machine Operators	8	8	0	0	0
Grader, Dozer, & Scraper Operators	7	7	0	0	0
Operating Engineers	67	87	20	5	25
Helpers - All Other Construction Trades	17	19	2	0	2
All Other Helpers & Laborers	74	94	20	6	26
TOTAL OF ALL OCCUPATIONS	630	754	124	38	162

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Electrical Mechs./Installers/Repairers
Telephone & Cable TV Line Installers/Repairers

All Extraction Workers, Exc. Helpers
Earth Drillers, Exc. Oil & Gas

All Other Mechanics, Installers, & Repairers
Heating, Air Conditioning, & Refrigeration
Mechanics & Installers

All Precision Metal Workers
Sheet Metal Workers

All Other Construction Trades Workers
Reinforcing Metal Workers
Painters & Paperhangers - Construction &
Maintenance
Plumbers, Pipefitters, & Steamfitters
Structural Metal Workers

Helpers - All Other Construction Trades
Helpers - Electricians & Powerline Installers
Helpers - Painters, Paperhangers, & Plasterers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

SANTA CRUZ COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	28	35	7	1	8
Financial Managers	7	9	2	0	2
Construction Managers	10	13	3	1	4
General Managers & Top Executives	11	13	2	0	2
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	2	2	0	0	0
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	16	18	2	0	2
Secretaries	8	9	1	0	1
Bookkeeping, Accounting, & Auditing Clerks	6	7	1	0	1
All Other Clerical & Administrative Support	2	2	0	0	0
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	124	153	29	5	34
All First Line Managers/Supervisors - Maintenance/Production/Construction	3	3	0	0	0
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	8	9	1	0	1
All Other Mechanics, Installers, & Repairers	1	1	0	0	0
Carpenters	32	41	9	2	11
Brick Masons	17	21	4	1	5
All Other Construction Trades Workers	17	19	2	1	3
All Precision Metal Workers	9	11	2	0	2
All Material Moving Equipment Operators	3	4	1	0	1
Helpers - All Other Construction Trades	12	15	3	0	3
All Other Helpers & Laborers	22	29	7	1	8
TOTAL OF ALL OCCUPATIONS	170	208	38	6	44

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Construction Trades Workers
Painters & Paperhangers - Construction &
Maintenance
Glaziers

Helpers - All Other Construction Trades
Helpers - Brick & Stone Masons
Helpers - Carpenters & Related

All Precision Metal Workers
Sheet Metal Workers

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

YAVAPAI COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	133	162	29	10	39
Financial Managers	15	19	4	1	5
Construction Managers	44	54	10	3	13
General Managers & Top Executives	74	89	15	6	21
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	45	54	9	3	12
All Financial Specialists	5	6	1	0	1
Cost Estimators	27	32	5	3	8
All Other Management Support Workers	4	4	0	0	0
All Engineers	3	4	1	0	1
All Engineering & Related Technicians	6	8	2	0	2
SALES & RELATED OCCUPATIONS	13	14	1	0	1
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	137	158	21	14	35
Secretaries	55	66	11	8	19
Bookkeeping, Accounting, & Auditing Clerks	40	44	4	3	7
Payroll & Timekeeping Clerks	6	7	1	0	1
General Office Clerks	23	28	5	3	8
Stock Clerks - Stockroom, Warehouse, or Yard	8	8	0	0	0
All Other Clerical & Administrative Support	5	5	0	0	0
SERVICE OCCUPATIONS	15	17	2	1	3
All Protective Service Workers	7	8	1	1	2
All Cleaning/Building Service, Exc. Private House	8	9	1	0	1
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	7	8	1	1	2
Gardeners & Groundskeepers, Exc. Farm	7	8	1	1	2
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	1,069	1,348	279	73	352
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	46	58	12	2	14
All First Line Managers/Supervisors - Maintenance/Production/Construction	4	4	0	0	0
Mobile Heavy Equip. Mechanics, Exc. Engines	13	15	2	0	2
All Other Electrical Mechs./Installers/Repairers	3	3	0	0	0
Heating, Air Conditioning, & Refrigeration Mechanics & Installers	55	68	13	5	18
All Other Mechanics, Installers, & Repairers	24	28	4	1	5
Carpenters	221	306	85	28	113
Drywall Installers	26	32	6	1	7
Tapers	21	26	5	2	7
Electricians	62	77	15	6	21
Brick Masons	60	77	17	4	21
Concrete & Terrazzo Finishers	35	45	10	1	11
Plumbers, Pipefitters, & Steamfitters	42	52	10	3	13
Roofers	30	37	7	1	8
All Other Construction Trades Workers	116	139	23	6	29
All Extraction Workers, Exc. Helpers	4	4	0	0	0
Sheet Metal Workers	27	33	6	1	7
All Precision Woodworkers	12	15	3	0	3
All Plant & System Operators	2	2	0	0	0
Truck Drivers, Heavy or Tractor Trailer	17	19	2	0	2
All Other Motor Vehicle Operators	14	16	2	0	2
Excavating & Loading Machine Operators	16	18	2	1	3
Grader, Dozer, & Scraper Operators	15	17	2	0	2
Operating Engineers	23	26	3	1	4
All Other Material Moving Equipment Operators	5	6	1	0	1
Helpers - Brick & Stone Masons	33	40	7	1	8
Helpers - Carpenters & Related	70	96	26	4	30
Helpers - All Other Construction Trades	14	17	3	0	3
All Freight & Material Movers, Hand	2	2	0	0	0
All Other Helpers & Laborers	57	70	13	5	18
TOTAL OF ALL OCCUPATIONS	1,419	1,761	342	102	444

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

YAVAPAI COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL

All Financial Specialists
Accountants & Auditors

All Engineering & Related Technicians
Drafters

SALES & RELATED OCCUPATIONS

Sales Representatives, Exc. Retail

SERVICE OCCUPATIONS

All Cleaning/Building Service, Exc.
Private House
Janitors & Cleaners, Exc. Maids & Housekeeping

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Mechanics, Installers, & Repairers
Bus & Truck Mechs., & Diesel Eng. Specialists

All Other Construction Trades Workers
Lathers
Painters & Paperhangers - Construction &
Maintenance
Pipelayers
Insulation Workers
Glaziers

All Precision Woodworkers
Cabinetmakers & Bench Carpenters

All Other Motor Vehicle Operators
Truck Drivers, Light - Incl. Delivery & Route

All Other Material Moving Equipment Operators
Pump Operators

Helpers - All Other Construction Trades
Helpers - Plumbers, Pipefitters, & Steamfitters

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

YUMA COUNTY

	ESTIMATED MAY 1984 EMPLOYMENT	PROJECTED MAY 1988 EMPLOYMENT	JOB OPENINGS DUE TO GROWTH 1984-1988	JOB OPENINGS DUE TO SEPARATIONS 1984-1988	TOTAL JOB OPENINGS 1984-1988
MANAGERIAL & ADMINISTRATIVE OCCUPATIONS	86	97	11	1	12
Financial Managers	16	18	2	0	2
Construction Managers	35	39	4	0	4
General Managers & Top Executives	34	39	5	1	6
All Other Managers & Administrators	1	1	0	0	0
PROFESSIONAL, PARAPROFESSIONAL, & TECHNICAL	38	40	2	1	3
Accountants & Auditors	9	9	0	0	0
Cost Estimators	16	18	2	1	3
All Engineers	6	6	0	0	0
Drafters	5	5	0	0	0
All Other Engineering & Related Technicians	2	2	0	0	0
SALES & RELATED OCCUPATIONS	15	19	4	2	6
CLERICAL & ADMINISTRATIVE SUPPORT OCCUPATIONS	92	102	10	7	17
Secretaries	31	35	4	3	7
Bookkeeping, Accounting, & Auditing Clerks	24	27	3	2	5
Payroll & Timekeeping Clerks	5	5	0	0	0
General Office Clerks	24	27	3	2	5
All Office Machine Operators	1	1	0	0	0
All Material Recording/Scheduling/Dist.	3	3	0	0	0
All Other Clerical & Administrative Support	4	4	0	0	0
SERVICE OCCUPATIONS	29	35	6	4	10
Janitors & Cleaners, Exc. Maids & Housekeeping	29	35	6	4	10
AGRICULTURAL, FORESTRY, & RELATED OCCUPATIONS	19	25	6	3	9
Gardeners & Groundskeepers, Exc. Farm	19	25	6	3	9
PRODUCTION, MAINTENANCE, & MATERIAL HANDLING	829	1,001	172	39	211
First Line Managers/Supervisors - Construction					
Trades & Extraction Workers	39	43	4	1	5
Heating, Air Conditioning, & Refrigeration					
Mechanics & Installers	57	70	13	5	18
All Other Mechanics, Installers, & Repairers	12	12	0	0	0
Carpenters	66	87	21	5	26
Drywall Installers	52	68	16	2	18
Electricians	49	60	11	4	15
Brick Masons	26	31	5	1	6
Concrete & Terrazzo Finishers	20	25	5	0	5
Painters & Paperhangers - Construction & Maintenance	47	59	12	4	16
Plumbers, Pipefitters, & Steamfitters	22	26	4	1	5
Roofers	27	33	6	1	7
All Other Construction Trades Workers	98	117	19	1	20
All Extraction Workers, Exc. Helpers	1	1	0	0	0
Sheet Metal Workers	32	38	6	2	8
All Other Precision Metal Workers	4	5	1	0	1
All Metal & Plastic Machine Operators	2	2	0	0	0
All Hand Workers	6	7	1	0	1
Truck Drivers, Heavy or Tractor Trailer	12	13	1	0	1
Truck Drivers, Light - Incl. Delivery & Route	7	7	0	0	0
Operating Engineers	17	18	1	1	2
All Other Material Moving Equipment Operators	9	9	0	0	0
Helpers - Brick & Stone Masons	74	91	17	3	20
Helpers - Carpenters & Related	14	18	4	0	4
Helpers - Painters, Paperhangers, & Plasterers	15	18	3	0	3
Helpers - All Other Construction Trades	23	26	3	1	4
All Freight & Material Movers, Hand	4	4	0	0	0
All Other Helpers & Laborers	94	113	19	7	26
TOTAL OF ALL OCCUPATIONS	1,108	1,319	211	57	268

ESTIMATED EMPLOYMENT AND JOB OPENINGS
CONSTRUCTION

YUMA COUNTY (CONTD.)

Confidential data for certain occupations have been added to "All" or "All Other" categories or collapsed into major occupational classes as follows:

SALES & RELATED OCCUPATIONS

Other Sales Representatives, Exc. Retail

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING

All Other Construction Trades Workers
Ceiling Tile Installers/Acoustical Carpenters
Tapers
Lathers
Reinforcing Metal Workers
Plasterers & Stucco Masons
Pipelayers
Insulation Workers
Glaziers
Structural Metal Workers

PRODUCTION, MAINTENANCE, & MATERIAL HANDLING (CONTD.)

All Hand Workers
Welders & Cutters

Helpers - All Other Construction Trades
Helpers - Electricians & Powerline Installers
Helpers - Plumbers, Pipefitters, & Steamfitters



METHODOLOGY

Sample Selection and Response Rates

Occupational estimates for the construction industry were developed from a survey of employers throughout the state. Employers who were asked to participate in the survey were selected from a master employer file of firms doing business in Arizona, using standardized sampling techniques. A sample of establishments employing 4-99 employees and all establishments having 100 or more employees were surveyed. The entire sample was composed of 2,625 firms with a usable response rate of 85 percent. Firms responding accounted for 88 percent of the industry's employment.

Employment Projections

Projecting occupational employment and demand is accomplished in two basic stages. First, total FIRE employment is estimated for the target years. These forecasts are computed using an econometric model driven by forecast values for variables such as national unemployment, interest rates, and industrial production. Staffing pattern ratios, as determined by the OES survey, are then applied to the industry employment projections and represents the second stage of the forecasting methodology.

Job Openings

"Total Job Openings" represents the sum of openings resulting from expansion and replacement during the projection period. Expansion is the numerical difference in employment for a given period. Replacement represents job openings that transpire due to separations from the labor force, i.e., death, retirement, and pregnancy.¹ The "Total Job Openings" column does not account for labor turnover, i.e., openings created when a worker changes jobs, leaving the job to be filled by someone else. These vacancies are generally the largest source of job openings.

Limitations of the Data

The projection method does not account for cyclical, seasonal, and such external factors as sudden discontinuations or initiations of major government programs.

Employment forecasts for the nonmetropolitan counties are based on growth rates developed for the "balance of state" (Arizona less Maricopa and Pima counties) rather than for individual counties.

¹ "Tomorrow's Manpower Needs," Supplement No. 4, BLS, 1974, pp. 11-16.

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OCCUPATIONAL EMPLOYMENT STATISTICS, 733A
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PHOENIX, ARIZONA 85005



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